

PRODUCTION

FOR THE

PEOPLE

BY

FRANK VERULAM

With a Foreword by

W. H. WILLIAMS

(Secretary, Labour Research Department)



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CONTENTS

Foreword	xi
Preface	xv
CHAPTER	PAGE
I. The Nature of the Problem	I
II. Poverty: Theoretical and Actual	6
III. The Distribution of Incomes	17
IV. The Construction of a Minimum and a Reasonable Standard of Living	21
(1) THE POVERTY STANDARDS OF PREVIOUS INVESTIGATORS	21
(2) HOW DOES THE WORKER ACTUALLY SPEND HIS INCOME?	26
(3) A MINIMUM AND A REASONABLE STANDARD OF LIVING APPLICABLE TO PRESENT-DAY CONDITIONS	29
(a) FOOD	29
(b) HOUSING	36
(c) CLOTHING	40
(d) FUEL AND LIGHT	43
(e) MISCELLANEOUS	44
(4) THE COST OF THE STANDARDS AND THE NUMBER OF PEOPLE LIVING BELOW EACH	46
V. Plenty on the Basis of Equality of Incomes	49
VI. The Increases in Income and Production Necessary to Achieve the Minimum and Reasonable Standards	53
(1) MONEY INCOMES	53
(2) PHYSICAL QUANTITIES	57
(a) FOOD	57
(b) HOUSING	59

CHAPTER	PAGE
VII. How Much Could We Produce?	63
(1) WHAT IS MEANT BY PRODUCTIVE CAPACITY?	63
(2) THE EVIDENCE OF THE INDEXES OF PRODUCTION	68
(3) FUEL AND LIGHT	71
(4) POSSIBLE IMPROVEMENTS IN THE COAL INDUSTRY	72
(5) HOUSING	76
(6) CLOTHING	77
(7) THE TEXTILE TRADES	79
(8) MISCELLANEOUS EXPENDITURE AND OUTPUT	90
(9) IRON AND STEEL	94
(10) FOOD SUPPLIES	97
(11) CAN WE GROW MORE FOOD IN BRITAIN?	107
(12) THE PROBLEM OF IMPORTS	115
(13) CONCLUSIONS	120
(14) THE DEPENDENCE OF TRADE RECOVERY ON REARMAMENT	127
VIII. What is Wrong with Our Economic System?	133
IX. The Growth of Monopolies, Subsidies and Restriction Schemes	173
(1) PLANNED DESTRUCTION	173
(2) INTERNATIONAL RESTRICTION SCHEMES	180
(3) RESTRICTION IN BRITISH INDUSTRY	188
(4) THE AGRICULTURAL MARKETING SCHEMES	193
(a) HOPS	193
(b) POTATOES	194
(c) BACON	195
(d) MILK	200
(5) SUBSIDIES	208

CHAPTER	PAGE
X. Planned Production for Community Consumption	214
(1) THE BASIC PRINCIPLES OF SOCIALIST PLANNING	214
(2) THE ORTHODOX ECONOMISTS' CRITI- CISMS OF SOCIALIST PLANNING .	216
(3) THE SOCIALIST ANSWER . . .	220
(4) THE PLANNING OF PRODUCTION .	236
(5) THE PLANNING OF FOREIGN TRADE .	250
(6) THE MACHINERY OF PLANNING .	254
(7) THE PLANNING OF INCOMES . .	255
(8) THE FIXING OF PRICES . . .	259
(9) SUMMARY OF THE ECONOMIC CONDI- TIONS NECESSARY FOR SOCIALISM .	263
(10) THE QUESTION OF COMPENSATION .	268
(11) THE POLITICAL STRUGGLE FOR SOCIALISM	279
APPENDICES	
I. The Distribution of Expenditure in Working-Class Family Budgets	283
II. Increases in Expenditure required for the Minimum and Reasonable Standards	291
Index	293

LIST OF TABLES

TABLE	PAGE
I. DISTRIBUTION IN 1934 OF PERSONS AND FAMILIES ACCORDING TO INCOME PER HEAD	19
II. COST OF THE B.M.A. MINIMUM DIET IN 1933 AND 1934	31
III. COMPARISON OF B.M.A. DIET 16 AND SIR JOHN ORR'S GROUP IV	33
IV. COST OF B.M.A. DIET AND AVERAGE EXPENDI- TURE ON FOOD FOR EACH OF SIR JOHN ORR'S GROUPS	34
V. RENTS ON THE MINIMUM AND REASONABLE STANDARDS ACCORDING TO SIZE OF FAMILY	40
VI. COST OF CLOTHING PER HEAD PER WEEK ON THE MINIMUM AND REASONABLE STANDARDS	43
VII. COST OF THE MINIMUM AND REASONABLE STAN- DARDS PER HEAD PER WEEK FOR EACH INCOME GROUP	47
VIII. AVERAGE WEEKLY CONSUMPTION PER HEAD OF CERTAIN FOODSTUFFS COMPARED WITH THOSE REQUIRED ON THE MINIMUM AND REASONABLE STANDARDS	50
IX. INCREASES IN TOTAL INCOME NECESSARY TO PROVIDE THE MINIMUM AND REASONABLE STANDARDS	54
X. DISTRIBUTION OF EXPENDITURE IN THE DIFFERENT INCOME GROUPS	54
XI. THE NATIONAL EXPENDITURE IN 1934 AND THE INCREASES IN EACH ITEM REQUIRED TO ACHIEVE THE MINIMUM AND REASONABLE STANDARDS	55
XII. PERCENTAGE INCREASE IN THE TOTAL CON- SUMPTION OF DIFFERENT FOODSTUFFS NECESSARY TO ACHIEVE THE REASONABLE STANDARD	58
XIII. PERCENTAGE INCREASES IN OUTPUT, AS COM- PARED WITH 1934, IN 1937 AND THE HIGHEST QUARTER IN THE PERIOD 1935-7	70
XIV. NUMBER OF HOUSES BUILT IN EACH OF THE YEARS 1933-7	76
XV. PERCENTAGES UNEMPLOYED IN THE CLOTHING TRADES IN 1934	79

we live is subjected to a very careful analysis. And here the author brings to his task a keen insight into the workings of modern society which is combined with a rare capacity for patient and industrious research. The result is a devastating criticism of capitalist economic relations. The material which has been brought together in these pages shows what happens under private ownership of the land, the factories and the workshops, and the detailed examination of the dominant trends in modern society which is to be found in the book will be invaluable to the student, the propagandist and to all who desire a fuller life for the mass of the people.

Now, under wartime conditions, with the whole economy being placed on a war footing, all these questions become more acute as each day passes. To-day, when the press, the radio, and other organs of war propaganda are urging a reduction of living standards as essential and inevitable, an analysis such as this is particularly welcome. Two trends are to be observed in this propaganda. The first voices the needs of big business and of monopoly capital. This trend clearly and without any trimmings seeks to place on the shoulders of the working people and the middle class the main burden of paying for the war, whatever the social consequences of such a policy may be. The second, which emanates from liberal and radical economists, is finding increasing support among sections of the labour movement. Under the plea of support for the war, it accepts as inevitable a substantial reduction in living standards. When all the verbiage is torn away, both trends have the same content and will lead to precisely the same disastrous results, i.e., a still further widening of the gap between the rich and the poor, and the creation of poverty, under-nourishment and social distress on a scale which will make the problem of the distressed areas, which caused such concern a few years back, appear small in comparison. The problem of widespread malnutrition, of poverty and unemployment has now been pushed into the background.

The financial Press is calling for a reduction in living standards as a necessary war measure. For example the *Financial News* (November 6th, 1939) argues that "a reduction in civil

consumption—that is in the standard of living—is unavoidable”; while the *Economist* (October 21st, 1939) discusses ways and means whereby “the consumption of the people can be reduced. . . .”

Then Mr. J. M. Keynes, who is trying to “sell” his particular schemes to the Labour Movement speaks (in a series of articles in *The Times*) of a rise in prices “up to say 20 per cent above pre-war” though he does not think that we can “depend on this remedy alone.” Mr. Keynes also suggests another possibility, some form of compulsory saving. As he prettily puts it, this would be “almost as good as a 10 per cent fall in real wages,” and might be achieved without labour unrest.

These and other proposals are now being discussed in the economic journals and financial press. Whether or no Mr. Keynes’ proposals are accepted is not the real issue; what is important to observe is that on all sides an insistent demand is being raised to cut wages by a fifth, a quarter or a third, whichever figure takes the writer’s fancy.

Accompanying the various proposals is the insidious suggestion that measures must be taken to prevent workers from securing wage increases. In the last resort this can only be secured if steps are taken to hamstring the trade union movement, either by making strikes illegal or by obtaining some voluntary agreement not to resort to strike action.

The Labour Movement must ask itself which road it intends to travel: whether it intends to travel the road of conciliation and adjustment to the needs of Imperialism, or whether it is prepared to adopt a consistent socialist policy, with all the struggle that it entails, in defence of the vital economic interests of the mass of the people. Present economic developments are but the continuation of trends that were already well advanced before war broke out, and have become greatly accelerated under war conditions. It was the development of these tendencies in the economic structure of society which was the real underlying cause of this war. Only a basic study of the cause of poverty, unemployment and war, will enable the active people in the Labour Movement to examine critically

various schemes which are now being put forward as a solution of to-day's problems.

There is, for example, a tendency in the growing literature on War Aims, such as the various plans for a Federal Union or the creation of a United States of Europe, to seek a solution of present-day problems in constitutional re-arrangements of capitalist states. This book will help to remind us that the problems of poverty, unemployment and war, cannot be solved by tinkering with the super-structure. It is the whole basis upon which our productive system rests that is at fault. *Production for the People* is the kind of book which Socialists need if they are to see their way forward.

AUTHOR'S PREFACE

IN the preparation of this study many references have been used which have been acknowledged in the text. Here I should like to express warm appreciation of the help and advice I have received from the Secretary and staff of the Labour Research Department, particularly in connection with the Chapter on the Growth of Monopolies and Restriction Schemes. Their files, moreover, have been of inestimable value.

Extensive use has been made of Sir John Orr's study of nutrition, *Food, Health and Income*, and of the work of B. S. Rowntree, of the Merseyside Social Survey and of the various publications of Political and Economic Planning. Use has also been made of the publications and library of the New Fabian Research Bureau (now incorporated with the Fabian Society). To all of these my thanks and acknowledgments are due.

My thanks are also due to Mr. E. W. Darling for his help in collecting and working over the material for the first part of this book, and to Mr. Maurice Dobb for his constructive criticism and many helpful suggestions.

The conclusions are my own, and for these I alone must take the responsibility, but in addition I hope that the information contained in this volume will prove helpful to all those who are working for a healthy and happy Britain. The book was actually ready for the press before the outbreak of war, but the problems with which it deals are now even more urgent. There is much discussion at the present time of building a new world after the war is over, some of which is distinctly reminiscent of the "Land fit for Heroes" which was promised during the last war. If this book can help towards a better understanding of the basic conditions necessary for building such a new world, it will not have been written in vain.

F. V.

December, 1939.

AD (DW)

CHAPTER I

THE NATURE OF THE PROBLEM

OF recent years there has been much discussion, both in the Press and in economic literature, of that problem which has become widely known as "the paradox of poverty in plenty". Ever since the collapse of the brief post-war boom, there have been something like a million people unemployed in this country, a figure scarcely touched in even the worst of the pre-war years. At first it was thought that unemployment of this magnitude was purely temporary, and that a trade revival was "just round the corner"; even as late as 1927 a Committee on Unemployment Insurance based its recommendations on the assumption that unemployment was a cyclical phenomenon, and that in future it could be expected to fluctuate around the 600,000 level. Unfortunately, not only was unemployment never reduced to anything like this level, but the onset of the world depression at the end of 1929 rapidly increased it to nearly three million. Even in 1937, when recovery was in full swing, there were still nearly a million and a half unemployed.

It was not surprising in these circumstances that people should increasingly wonder why this large volume of unemployment should persist when so many people were clearly not adequately provided with even the necessities of life in a modern community, let alone the luxuries; or that they should speculate as to the standard of life that could be provided if all the unemployed were to be set to work to provide the goods needed by the mass of the people. Families living in overcrowded conditions in slum tenements, with insufficient warmth and inadequate clothing, while bricklayers, miners and textile workers clamoured in vain for work—the paradox was plain for all to see.

Nor were explanations of the paradox lacking. Rather were they so numerous and so conflicting that the general public, or such part of it as was interested in the matter, merely became more confused than ever and settled down to regard the existing state of affairs as highly unsatisfactory, but, nevertheless, in some way inevitable.

Of the various groups who took it upon themselves to expound to the public the plenty that was obtainable if only their particular nostrum were adopted, probably the most persistent and most optimistic was that of Major Douglas and his followers. At any rate, their assertions concerning the waste and inefficiency in the existing system, and the abundance of goods available to all of us with only three or four hours' work a day if only we reformed our money system, helped considerably to popularize the "poverty in plenty" idea. The same sort of propaganda was later carried on in the United States by a group known as the Technocrats.

Unfortunately, Major Douglas and his friends confined themselves to vague general statements of the abundance that would become available if their proposals were adopted. Never once did they investigate the actual productive capacity of the country, nor estimate the increased production that would be possible if all our productive resources were fully employed. As a result, their "plenty" remained in the realm of general assertion, without any concrete basis of fact to support it.

Beside this rather nebulous idea of possible plenty for all, there has been another strand in public opinion since the War of a completely opposite character. There has been a very widespread notion that long hours and low wages were a thing of the past, and that, whatever else the War may have done, it did abolish, once and for all, the sweating and the grinding poverty that existed prior to 1914. Since then, admittedly, unemployment has been high, but it was argued that the increase in wages and shortening of hours that took place during the War, and the development of the social services since the War, had combined to remove the worst causes of poverty and ill-health, and had ensured that none need lack at least the necessities of life. It was claimed that the standard

of life of even the unemployed to-day was considerably higher than that of many employed persons before the War, and that under-nourishment due to poverty could be regarded as having disappeared.

This notion, like the other, was based more on vague sentiment than on scientific investigation. Nevertheless, it was very widely entertained, particularly among the middle classes. It was a comfortable doctrine, and its general acceptance was probably partly responsible for the failure of the protagonists of the poverty and plenty paradox to capture the public imagination. Their plenty was problematical, and their poverty more than doubtful, so why take them seriously?

Recently, however, the situation has rather changed. The investigations of Sir John Orr¹ and Dr. M'Gonigle,² which were given considerable publicity in the Press, have revealed that, despite all the improvements that have taken place, there is still a large section of the population whose incomes are inadequate to provide them with proper nutrition. On the other hand, the decline of British agriculture because of its failure to find markets for its produce, and the Minister of Agriculture's attempts to solve this problem, have forced a realization of the practical urgency of increasing the consumption of food-stuffs.

Thus the general public is becoming aware of the old paradox in a new light. It is no longer merely the slogan of a few small sects with queer ideas about money, or a useful political catchphrase; it has become an immediate practical problem, urgently demanding solution.

The present would thus appear an opportune moment for as complete an investigation as is possible of the whole problem. The whole discussion of the question of poverty and plenty has hitherto been based rather on assertion and counter-assertion than on an investigation of the actual facts. What is wanted now is an attempt to answer the questions: How much poverty still exists in this country? How much could we produce if all our resources were employed? How far could we provide a

¹ *Food, Health and Income*, by Sir John Orr.

² *Poverty and Public Health*, by G. C. M. M'Gonigle and J. Kirby.

reasonable standard of living for all our population in these circumstances?

In the first part of this book an attempt is made to answer these very pertinent questions. In this way it is hoped that the whole problem may be removed, so far as present data permit, from the realm of fancy to that of fact.

First, we must decide what we mean by poverty. This will involve us in a discussion of the idea of a "standard of living," and of the various elements of which it is composed. We shall find that the "minimum" standard, below which persons are deemed to be living in poverty, is not a fixed standard, but varies both with the state of scientific knowledge and with changes in our customs and conventions. In spite of this difficulty, we shall have to fix on a standard (actually, we shall find it necessary to fix two) for the purposes of our investigation. Having decided on our standards, the next step will be to estimate the number of persons living below those standards, after which we must calculate the increase in output necessary to bring such persons up to the required level. Finally, we shall have to investigate, so far as is possible with the inadequate data at present available, how far the present productive capacity of the country is sufficient to provide this increase. This will complete the first part of the book.

Without anticipating at this stage the results of our investigation, it is clear from the mere fact that about one and a half million men are out of work that a considerable increase in production, with a consequent raising of the standard of living of the poorest sections of the community, would be possible if all our productive resources were mobilized to this end. This leads us on to the further inquiry as to what steps, if any, are or have been taken to achieve this end, and why these steps have so far proved ineffective.

Finally, we shall examine, in the light of our previous investigations, what steps are necessary to achieve the maximum standard of living for all, compatible with the maintenance and increase of our productive resources. It is clear that the second part of our book must be considerably more theoretical in character than the first part. In consequence, it

will, of necessity, be more controversial. Nevertheless, we have attempted as far as possible to make the theory a logical deduction from the results of the practical inquiry, and, in any event, to present the facts in such a way that readers can draw their own conclusions for themselves.

CHAPTER II

POVERTY: THEORETICAL AND ACTUAL

WE all of us want to live a full and satisfactory life; and we each have our own idea of what constitutes the ideal life, and of the income necessary to maintain it. We should all probably agree that no standard of life can be regarded as fully satisfactory that does not allow for sufficient food, clothing, warmth, shelter and fresh air to maintain health and efficiency in the environment in which we actually live. We should probably agree further that "all work and no play makes Jack a dull boy," and that the ideal life must not only allow for adequate recreation and leisure, but must also include the provision of opportunities and amenities necessary to make our recreation and leisure enjoyable.

Stated in this vague way, there will probably be little or no disagreement. It is when we try to translate our abstraction into terms of actual everyday life, when we try to state concretely *how much* food and clothing, *how many* visits to cinemas and week-ends in the country, are necessary for a satisfactory life, that our difficulties arise. Then we find that, not only may one man's meat be another man's poison, that Jones abominates cars, while for Smith life would not be worth living without one, but that new needs and satisfactions are constantly arising, so that social customs and conventions *as a whole* are undergoing a continuous process of change. Indeed, it is probably true to say that the main difficulties involved in defining a standard of life arise not so much from the differences in individual tastes, which tend to average themselves out when we are dealing with large numbers of people, but from changes in such average tastes and fashions themselves. Our conception of a satisfactory standard of life, in fact, is not a static one, theoretically derived and fixed for all time, but is constantly

expanding as technical progress creates new opportunities for satisfaction, which, in turn, develop new needs that become embodied in our customary mode of life.

These difficulties become even more acute when we turn to the consideration of a *minimum* standard of life, which is the problem with which we are immediately concerned. We are trying to find out how many people are living in poverty, but what constitutes "poverty"? Where are we to draw the line?

Let us begin by defining the minimum standard of life, the poverty line, in general terms. For this purpose we cannot do better than take the definition used by Rowntree in deriving his well-known "Human Needs" standard. He defined this as a standard "below which no class of worker should be forced to live."¹ This definition, with which, expressed in this general form, no one is likely seriously to quarrel, is valuable because it brings out the essential difficulty of the whole conception; namely, that the poverty-line, like the "desirable" standard already discussed, is not absolute and unchanging, but is dependent on the customs and conventions of the time. What an English worker would think of as dire poverty would probably be considered a seventh heaven by a Chinese or Indian coolie.

It follows that we cannot just take one of the minimum standards worked out by previous investigators (such, for instance, as that adopted by Charles Booth in his classic investigation into poverty in London in 1890), adjust it for changes in prices and apply it to current conditions, without first considering whether such a standard is still appropriate. In fact, we may go further and say that, in view of the rapid changes that have been taking place over the last fifty years, both in the widening of the range of goods available to us and in the very fabric of the social structure itself, it is very improbable that standards evolved before the War will be applicable to present-day conditions. We must, therefore, face the task of constructing a fresh minimum, appropriate to current modes of life, although we shall, of course, have regard to the standards adopted by previous investigators.

¹ B. S. Rowntree, *The Human Needs of Labour* (1937 Edition), p. 79.

What are the requirements for which provision must be made in estimating a minimum "below which no worker should be forced to live"? Let us consider again for a moment our discussion at the beginning of this chapter on the ingredients of a fully satisfactory life—food, clothing, shelter, fresh air, recreation and leisure, together with the means of enjoying them. Clearly, a minimum standard must provide for *some* measure of all of these, though on a smaller scale than would provide for a fully satisfactory life. It may be argued by some that, although food, clothing, shelter and leisure must clearly be provided for, there is no need to make provision for recreation in estimating a minimum standard, however desirable it may be that everyone should enjoy it. To this we may answer that, even regarded purely from the health point of view, man cannot live by bread alone and that some interest in life apart from working and eating must be provided, if injurious psychological, and ultimately physical, reactions are not to follow.

It is at this point that the influence of changes in the *average* standard of life on the minimum become apparent. Riches and poverty are to a considerable degree relative terms, the poor man being one who is poor relative to his neighbours, rather than one who is poor in any absolute sense. The item concerning which absolute requirements can be laid down with the most certainty is food. Nevertheless, as we shall show later, many people will go without the minimum amount of food necessary for health rather than give up expenditure on other things which existing habits and conventions render customary. Furthermore, as the average standard of life in a community rises, and the variety of goods available for consumption increases, so the range of these "conventional necessities" increases also. For example, smoking has now become so much of a national habit that the man who cannot afford to offer his friends an occasional cigarette, even if he himself be a non-smoker, would definitely be considered to be living on the edge of poverty, if not actually over it; while the majority of men would spend some money on cigarettes even when, strictly speaking, they could not afford it. Thus a minimum standard must allow for some expenditure on cigarettes, even though

these are not essential to health; for a failure to do so would result in inadequate expenditure, not on cigarettes, but on food. What is more, the spread of the habit of smoking to women means that more must be allowed under this head to-day than would have been necessary before the War, when very few women smoked.

The same argument applies to expenditure on a large number of other items which, previously unknown or considered as luxuries, have now become conventional necessities. Nor is it only a question of expenditure directed to satisfying personal wants. A certain standard of dress and personal appearance is becoming increasingly a necessary condition for obtaining and maintaining employment. It is well known that one of the difficulties in finding employment of a man who has been unemployed for some time, as compared with one who has only recently become unemployed, is that of maintaining a respectable appearance. The man who is obviously down-at-heel, whose clothes are shabby and whose face is unshaven, stands far less chance than a man who looks tidy and is respectably dressed. This is particularly the case with the rapidly growing army of black-coated workers, shop assistants, typists and non-manual workers generally. Further, the standard of dress, and the consequent expenditure necessary to maintain one's job, has risen considerably as compared with pre-war years. This change in the standard of dress is particularly marked in the case of women, largely as a result of the greatly increased number of women who earn their own living.

There is one other important factor affecting the "miscellaneous" expenditure to be included in our minimum—perhaps in the long run the most important of all. This is the part played by the development of the social services, and, in particular, by the growth of our educational system. The disappearance of illiteracy, as a result of the introduction of compulsory education, has caused a widespread demand for newspapers, books, and periodicals of all kinds. Whereas in Charles Booth's time the ordinary working man read a newspaper once a week, if that, and the daily newspaper was confined to a relatively small section of society, nowadays nearly

everyone reads a daily and a Sunday paper, and many people read an evening paper in addition, to say nothing of a weekly local paper. The habit of reading newspapers, like that of smoking, has now become so deeply ingrained in the national life, that their deprivation involves definite psychological loss, so much so that rather than go without them altogether, most people will reduce their expenditure on necessities.

The influence of the increase in the general level of education goes further, however, than the mere desire to read newspapers. It is producing a desire for some form of cultural life among an ever-increasing section of the community. This has perhaps not yet reached the dimensions of the newspaper-reading habit, but it is, nevertheless, very widespread and is growing fairly rapidly. This desire shows itself in many ways, from joining one of the 1d. or 2d. circulating libraries, or going to the cinema each week, to going to evening classes and taking an intelligent and discriminating interest in books, the cinema and the theatre, public affairs and so on. Another aspect of the same phenomenon is shown in the increasing desire on the part of young people in the towns to get out into the country at week-ends, and by the development of associations catering for this need, such as the Youth Hostels Association.

We may sum the whole matter up by saying that the development of educational facilities, both compulsory and voluntary, has given rise to desires and needs which were previously unknown to the great majority of the population, but for which some satisfaction must be provided if considerable psychological malaise is to be avoided. In fact, once these needs have been felt, they are frequently satisfied even at the expense of cutting down expenditure on physical necessities.

So far we have been concerned with the various influences that affect a standard of life. We must now consider the methods of constructing a minimum standard in terms of money.

There are two main ways open to us. We can either calculate the bare minimum cost of the necessities of life—food, clothing, shelter, fuel and light—and then add a minimum allowance for household and miscellaneous expenditure; or we can calculate

POVERTY: THEORETICAL AND ACTUAL



the minimum amount and quality of food and shelter that are necessary to maintain health and efficiency and then by an actual examination of family budgets determine what level of income has to be reached before the expenditure on food and shelter becomes adequate. The result produced by the first method we may call the theoretical, or calculated, minimum; and that produced by the second the actual, or observed, minimum.

It might be thought that, provided the number of budgets on which the observed minimum is based is sufficiently large to give a fair sample, the two methods would give approximately the same results. In actual practice, however, it is most unlikely that they will. The theoretical minimum is based on the assumption that the prime necessities of life are a first charge on a person's income, and that after these have been satisfied the remainder is available for miscellaneous expenditure. In real life, however, as has been very forcibly shown in the investigation by M'Gonigle and Kirby, to which reference has already been made, things do not work out in this way at all. What actually happens is that the family incurs certain charges, for rent, insurance, payments on goods bought on the hire-purchase system, and so on, which *have* to be met each week unless the family is to default on its payments with the consequent loss of the furniture bought or of insurance benefits,¹ as the case may be. Once such charges have been incurred, the family endeavours to meet them, even if the income falls to such an extent that they cannot really be met without considerable encroachment on the margin available for food or other necessities. They tend, therefore, to become a first rather than a last charge on income. In addition, various household articles such as cooking and cleaning materials have to be replaced, doctors' bills have to be met, and other occasional but necessary expenditure provided for. All these things

¹ In the case of industrial assurance policies, a paid-up policy for a considerably reduced sum assured may be obtained on cessation of premiums, dependent on the type of policy and the period for which premiums have been paid. In the case of articles bought on the hire-purchase system, failure to pay usually means a total loss if less than one-third of the total instalments have been paid.

constitute a drain on the family income, which in greater or less degree has to be met before the housewife begins to consider the kind and amount of food she will buy. In fact, food, so far from being the first item of expenditure, tends to be the last.

That this is possible is due to the fact that the amount and quality of food required to stave off the actual pangs of hunger can be bought at considerably smaller cost than that necessary to maintain health. Whereas stress was previously laid on a sufficiency of energy-producing and body-building foods—fats, carbohydrates and proteins—it is now recognized that certain other foods, the so-called “protective foods,” are equally important. These provide the mineral salts and vitamins, a sufficiency of which is necessary to prevent diseases such as rickets, nutritional anaemia and dental caries, and generally to enable the body to withstand the infections to which it is exposed. Unfortunately, these protective foods are also the costly ones, so that there is a strong temptation, whenever the family income is limited, to restrict their consumption and increase that of the cheaper foods which just satisfy hunger. This temptation is reinforced by the fact that the harmful effects of an insufficiency of the protective foods may not show themselves for a considerable time, and that, in any event, the majority of people are not even aware that these effects are due to the inadequacy of their food. The extension of the range of conventional necessities which we have discussed above has increased the pressure on a family with a given income to cut down its total expenditure on food by reducing the amount spent on the protective foods, while the greatly increased availability and cheapness of tinned as compared with fresh food has provided the necessary facilities for so doing.

In calculating a theoretical standard by estimating the minimum cost of the bare necessities and then making a small addition for miscellaneous expenditure, it is almost certain that the allowance for the latter will be quite inadequate, owing to the fact that it is impossible to state *a priori* what miscellaneous expenditure is “necessary.” The method that is usually adopted is to make an estimate of the cost of the minimum of

cleaning materials and other household necessities, plus the cost of compulsory social insurance contributions and of travel to and from work, add on a small allowance for "beer and baccy", and there is the miscellaneous expenditure to be included in the standard! Such a method, however, is completely fallacious, for it ignores both the existence of the various "prior charges" discussed above, and the possibility of expanding expenditure on conventional necessities and of satisfying cultural needs by restricting the purchase of the relatively costly protective foods. To put the point another way, the family living on the minimum income derived in this way could only keep itself in health by a strict allocation of its expenditure on the lines laid down in the minimum standard. In practice, however, such a strict allocation of expenditure would be found to be impossible, because the standard budget makes no provision for the greater part of those miscellaneous expenditures which in actual life are unavoidable as soon as a community rises above the coolie level. There is also the further difficulty that the cost of the necessities included in the budget is usually based on the minimum prices obtainable in the cheapest markets. In real life it is impossible always to shop in the cheapest centre, so that the actual cost of the articles provided for in the budget often exceeds the estimated cost.

We are therefore forced to the conclusion that the only scientific way of estimating the "miscellaneous" expenditure—i.e. expenditure other than that on food, housing, clothing, fuel and light—to be included in the minimum standard is by the examination of family budgets at different levels of income, with a view to ascertaining what "prior charges" rank in front of the provision of an adequate diet. Provided we can determine the minimum food requirements for the maintenance of health, and the cost of obtaining them, we have both a basis on which to construct our minimum and a criterion by which we can investigate existing family expenditures. By seeing how "miscellaneous" expenditure varies with food expenditure, in particular in the range of incomes on either side of that income at which food expenditure just becomes adequate, we can determine how much should be allowed under this head.

Minimum food requirements in terms of calories, proteins, vitamins, etc., are now known with a fair degree of accuracy, but when we come to the cost of the food which will provide these necessary requirements there is much greater difference of opinion. Here also we can derive both a "theoretical" and an "observed" minimum. The "theoretical" minimum is based on the minimum prices charged for the minimum amount of food required, and to that extent is, it is true, based on observation. The "observed" minimum on the other hand, is based on the expenditure actually incurred by those families whose food consumption is just adequate from the dietetic point of view. As we shall show in greater detail in a later chapter, the first method was adopted by the Nutrition Committee of the British Medical Association, while the second was used in the investigation by Sir John Orr. The dietetic requirements adopted were very similar in the two investigations, but the cost of providing for them as determined by Sir John Orr was some two-thirds higher than as determined by the British Medical Association. This difference was due in the main to the difference in the method adopted.

The foregoing discussion of the constitution and construction of a minimum standard of living has of necessity been rather discursive. It may be as well, therefore, to summarize the conclusions so far reached.

A minimum standard of life, below which people can be said to be living in poverty, is not a fixed standard applicable to all times and places. As the average standard of life of a community rises, so does their conception of what constitutes poverty rise also. The increase in the range of available goods, coupled with the spread of education, gives rise to widespread needs and desires which were previously completely unknown or were confined to a small section of the community. Some satisfaction of these new needs is essential for continued health and happiness, and must be allowed for in arriving at our minimum standard. The justification for this is based not so much on ethical or moral considerations, as on the empirical fact that, provided the actual pangs of hunger are satisfied, people will, if necessary, cut into the margin available for

buying food in order to satisfy, at least partially, these new needs. This tendency is accentuated by the fact that many goods and services (e.g. insurance) are paid for by weekly instalments, and that once liability for these has been incurred there is considerable pressure to maintain them, even if this can only be done by cutting down expenditure on necessities. Such weekly payments, possibly undertaken when the family was relatively prosperous, tend to become a first charge on income even when this is decreasing, so that the margin available for expenditure on food must be estimated *after* allowing for such payments.

As a result, the old method of calculating the cost of the theoretical minimum of the bare necessities of life, and arguing that this constitutes the "poverty line," can no longer be considered adequate. As soon as we admit the inclusion of some conventional necessities in our minimum budget, we must, of necessity, pass from the theoretical to the observed minimum. That is to say, the only way of determining what miscellaneous expenditure is to be included is by examining how people do actually spend their money. There is, of course, considerable room for individual judgment in deciding what particular items of such expenditure are due to individual tastes, and what can be legitimately considered as conventionally "necessary." Nevertheless, such individual variations tend to average themselves out, and what we are concerned with is not so much the way in which the miscellaneous expenditure is actually spent, as the total amount which is considered necessary.

Previous investigations have in the main been concerned with what we may call theoretical poverty; that is to say, the amount of poverty that would exist even if the whole income were spent in the most advantageous way on the bare necessities of life. Such investigations are not without value as showing the amount of poverty existing on the most optimistic assumptions. Our primary concern, however, is with the amount of *actual* poverty existing. We want to find out how many people are actually inadequately fed, clothed and housed, given the customs and habits prevailing among the working-class at the present time; not how many people

would be inadequately fed, clothed, and housed if they were both sufficiently highly educated to know how to spend their money to the maximum advantage and at the same time were at such a low level of culture as to have no desires or needs beyond the bare necessities of life.

Nevertheless, the conception of a minimum standard as a measure of the amount of theoretical poverty has become so widely accepted that we have thought it best to construct two standards which, in order to differentiate them, we shall call respectively the "minimum" and the "reasonable" standard. The first will approximate to the "theoretical" minimum discussed above. Some allowance for miscellaneous expenditure will be made, but it will be kept deliberately on the low side, and the allowance for food will be based on the theoretical minimum calculated by the British Medical Association Committee. The "reasonable" standard, on the other hand, will approximate more nearly to the "observed" minimum. A more lavish allowance for miscellaneous expenditure will be made, to allow for the widening of tastes, etc., that has taken place since the war, while the amount of expenditure on food will be based on the observed minimum estimated by Sir John Orr.

The first standard may perhaps be said to approximate to the "level below which no worker should have been forced to live" before the last war, and the second to the corresponding level to-day. It is, after all, only natural that, in view of the great increase in our productive forces, the latter should be higher than the former.

CHAPTER III

THE DISTRIBUTION OF INCOMES

THE first step in our investigation is to group the population according to the income they receive. It is necessary to do this even before we attempt to calculate our minimum or reasonable standards because the standard of living of any family depends not only on the income coming in week by week, but also on the number and ages of the members of the family supported by that income. We have therefore not only to group our families according to income, but also to find out the average composition of the families, particularly in respect of the relative number of children and adults in each group. Only then can we calculate the cost of the minimum and reasonable standards applicable to each group.

The first attempt to obtain a distribution of the whole population into income groups, with a view to ascertaining how many people receive incomes adequate to maintain health, was that made by Sir John Orr for the year 1934, and published in his book *Food, Health and Income*. There had been previous investigations into the distribution of the national income between the various social classes, and also into that of incomes paying income-tax. This, however, was the first attempt to ascertain the distribution of incomes which are below the tax-exemption limit, and which correspond broadly to the incomes received by the wage-earning class.

Sir John Orr's investigation, beside being the first of its kind, is novel in another respect. Instead of adopting the usual procedure of grouping the income-earners according to the size of the income received, he groups the whole population according to the amount of income available for each member of the family. He considers the family as a unit, adds

together the incomes received by the various members of the family and divides the total by the number of members in the family, thus obtaining the amount of income per head. In this way he allows for the fact, which the usual method of grouping conceals, that two persons A and B may both have the same income; but if A has only himself to support, while B has a wife and two children, then A is much better off financially than B. Moreover, it is not only B, but his wife and children also, who are living at a lower standard than A. It is clear that any method of grouping which treated A and B alike would be useless as a basis for an investigation into standards of living: for not only does it assume A and B to be on the same level, but it also ignores the fact that four people are living on B's level, as compared with one on A's level.

On the other hand, this method is open to the criticism that some items of expenditure in a family budget do not increase directly in proportion to the number of persons in the family. For instance, the rent which a family of four would have to pay for suitable housing accommodation is usually considerably less than twice that which a family of two would have to pay. Again, the method treats a child as equivalent to an adult, whereas in general it does not cost as much to provide for a child at a given standard of living as it does for an adult. We shall deal with some of the difficulties thus raised in more detail later on when we come to work out the cost of "minimum" and "reasonable" standards of living on a per head basis. All that need be said at this point is that in order to obtain the basis for a complete investigation, it would be necessary to classify the population both according to income per head and according to size and composition of family. Unfortunately, such a complete analysis is not possible owing to the lack of the necessary data. We must therefore content ourselves with obtaining the size and composition of the *average* family in each income group, which we can do approximately from the details given by Sir John Orr. If we calculate the cost of our standards on the basis of the average family so obtained for each group, and then apply this to the

group as a whole, it is not likely that the error involved will be at all large.

The following table shows the total number of persons in each income group, as estimated by Sir John Orr, the total number of families and of children under 14 respectively, and the average number of persons and of children per family:

TABLE I

Distribution in 1934 of Persons and Families according to Income per head

<i>Group</i>	<i>Income per head</i>	<i>No. of Persons (000's omitted)</i>	<i>Per-cent-age</i>	<i>No. of Families (000's omitted)</i>	<i>Per-cent-age</i>	<i>No. of Children under 14 (000's omitted)</i>	<i>Per-cent-age</i>	<i>Average No. of Persons per family</i>	<i>Ave. No. of Children per family</i>
I	Up to 10s	4,500	10	1,100	9	2,200	21	4.19	2.05
II	10s.—15s.	9,000	20	2,200	18	3,200	30	4.14	1.45
III	15s.—20s.	9,000	20	2,200	18	2,200	21	4.12	1.03
IV	20s.—30s.	9,000	20	2,600	22	1,300	12	3.40	.48
V	30s.—45s.	9,000	20	2,600	22	1,100	10	3.40	.43
VI	Over 45s.	4,500	10	1,300	11	600	6	3.40	.43
	Total	45,000	100	12,000	100	10,600	100	3.72	.88

Note.—The figures for the number of families and number of children have been calculated from the material given on p. 65 of *Food, Health and Income* (2nd Edition), and are given to the nearest 100,000. The averages in the last two columns have been calculated from the more detailed figures given in the same source.

The only features of the table calling for comment at this stage are the relatively small number of persons and the strikingly small number of children contained in the average family, particularly in Groups IV to VI. Group I, comprising 10 per cent of the total number of persons, contains 21 per cent of the children; yet even this group has an average of only two children per family. Furthermore, in all the groups except the first (where there are only two), there are approximately three persons per family who are over 14. Most previous investigations into poverty have been based on a family of five—man, wife, and three children. As a result the standards derived from them cannot be applied without modification to the above groups. It will be necessary to bear

these characteristics in mind both when we come in a later section to calculate our minimum and reasonable standards, and also in making any comparison between our standards and those used in previous surveys.

Having obtained our distribution of incomes, the next step is to construct our minimum and reasonable standards. Before actually doing this, however, it will be as well to examine briefly the methods and standards used in previous investigations into poverty in this country.

CHAPTER IV

THE CONSTRUCTION OF A MINIMUM AND A REASONABLE STANDARD OF LIVING

(I) *The Poverty Standards of Previous Investigators*

THE first large-scale investigation into poverty in this country was that undertaken by Charles Booth and published under the title *Life and Labour of the People in London*. The inquiry actually stretched over several years, but may be taken approximately to refer to conditions as they were in 1890. Booth divided the population of London into eight classes, of which the first four, consisting of the lowest class (semi-criminals, loafers, etc.), the very poor, and the poor,¹ together constituted those living in poverty; while the remainder, consisting of persons living in increasing degrees of comfort, together constituted those living above the poverty line. To give Booth's own definitions:

By the word "poor" I mean to describe those who have a sufficiently regular though bare income, such as 18s. to 21s. per week for a moderate family; and by "very poor" those who, from any cause, fall much below this standard . . . my "poor" may be described as living under a struggle to obtain the necessaries of life and make both ends meet; while the "very poor" live in a state of chronic want.²

The investigation was based on a large number of house-to-house inquiries, and the classification seems to have been based on general considerations, such as the type of family and the

¹ There were two classes of "poor", those with small but regular earnings, and those with higher but intermittent earnings.

² *Life and Labour of the People in London*, Vol. I, p. 33.

nature of the work done, supplemented by the personal observation of the inquirers. There was no attempt to construct a minimum standard in detail. We can say, therefore, that Booth's poverty line was an observed minimum, but was based on such general considerations as to be of little use in calculating a minimum standard to-day.

The next investigation, into poverty in York, was published by Seebohm Rowntree in 1901 in a book called *Poverty: A Study of Town Life*. Rowntree did calculate a minimum standard, which should be just sufficient "to obtain the minimum necessities for the maintenance of merely physical efficiency."¹ Using this standard as a measuring-rod he distinguished between two kinds of poverty: "primary" poverty, where earnings were insufficient to provide his minimum; and "secondary" poverty, where earnings were sufficient to provide the minimum necessities but failed to do so because "some part of it is absorbed by other expenditure either useful or wasteful."² Although Rowntree's minimum is a calculated one, his distinction between "primary" and "secondary" poverty clearly corresponds to that between "theoretical" and "actual" poverty which we discussed in Chapter II.

Rowntree's standard provided only for the bare necessities of life. The food allowed for did not include meat and was less generous than that required by the Local Government Board for workhouses; while its cost was calculated on the assumption that exceptional economy was exercised in buying and in housekeeping. The cost of clothing was based on answers to the question: "What in your opinion is the very lowest sum upon which a man can keep himself in clothing for a year?" The various items of clothing were gone over in detail, mainly with those "who knew what poverty meant," and had learned from hard experience what could be "done without."³ Most of it was assumed to be bought secondhand.

The cost of other items (except rent, where the actual rent paid was taken) was estimated on similar low bases. 2d. per head per week was allowed to cover soap and other household necessities.

¹ Rowntree, op. cit., pp. 86-7.

² Ibid.

³ Ibid.

In view of the extremely stringent bases adopted it is not surprising that Rowntree found that whereas 10 per cent of the population of York were living in primary poverty, a further 18 per cent were living in secondary poverty. One cannot help feeling that not all the secondary poverty can be ascribed to expenditure of part of the earnings on items other than the bare necessities.

In 1912-13 a similar investigation was carried out by Bowley and Burnett-Hurst in the four towns of Northampton, Warrington, Stanley and Reading. They used Rowntree's standards for clothing and sundries, but were slightly less rigid with regard to food, as they allowed for some expenditure on meat. In 1924 Bowley and Hogg repeated their inquiry in the four towns and added a further town, Bolton. The standards adopted were the same except for the adjustments necessitated by the changes in prices that had occurred in the intervening period.

In 1914 Rowntree made a further investigation on the basis of a new standard constructed on more generous lines. This is his famous "Human Needs" standard below which "no worker should ever be forced to live," to which reference was made in Chapter II. The food allowed was slightly more generous than in his previous standard, and included meat. Its cost represented "the lowest sum which members of the class of unskilled workers, as a whole, must expend upon food if they are to provide adequately for the maintenance of physical efficiency."¹

The allowance for clothing was very much more generous than in the earlier standard, and allowed for some expenditure on new clothing. Nevertheless it was still very low, being based on inquiries among "men and women who knew from first-hand experience at how low a cost it is possible to clothe a family."² The weekly amount for household sundries was 4*d.* per head, double that allowed in the earlier standard.

Finally, Rowntree included an allowance of 5*s.* a week per family for "personal sundries," an item which had not appeared

¹ Rowntree, *Human Needs of Labour*, p. 50 (Original Edition).

² Rowntree, *op. cit.*, p. 100.

in any of the earlier standards. Of this 5s., National Health Insurance contribution accounted for 4d., and it was assumed that a large part of the remainder was spent by the father on Trade Union subscriptions, fares, sick club and insurance contributions, etc., which do not vary much with the size of the family. Thus the "Human Needs" standard, although far from perfect, does at least begin to approach the idea of the reasonable (or observed minimum) standard as discussed in Chapter II, for it does provide for some expenditure on items other than the prime necessities.

Nevertheless, it is still, in the main, a calculated rather than an observed standard. In 1937, Rowntree published a new edition of *The Human Needs of Labour*, in which he revised and brought up to date his "Human Needs" standard. The general principles, however, on which he based his investigation, remained the same. In the revised standard, the allowance for personal sundries is raised to 9s. a week.

In 1929 an inquiry into poverty in London was carried out by the London School of Economics under the direction of Sir H. Llewellyn Smith. This *New Survey of London Life and Labour* was an attempt to reproduce as far as possible the earlier inquiry of Charles Booth, with a view to seeing what changes in the amount of poverty had occurred in the intervening period. To make the results of the two inquiries comparable it was necessary to take the same standard of poverty in both cases, although it is admitted that "it is unlikely that a standard of poverty based on the conditions and conventions of forty years ago would commend itself to the public opinion of to-day."¹

A standard was constructed based on those used by Rowntree (the Poverty, *not* the Human Needs, standard) and Bowley in the earlier investigations, corrected for changes in prices. The result was compared with a budget representing Booth's poverty line, similarly adjusted for price changes. As the two standards thus derived had a very close resemblance it was decided to use the one based on Rowntree and Bowley so as to make the results of the New Survey comparable with their

¹ *New Survey of London Life and Labour*, Vol. I, p. 11.

investigations also. Since the authors emphasize that "there has been no attempt to fix a level of present-day 'poverty' according to present-day ideas. The sole aim has been to apply Charles Booth's standard to present economic conditions,"¹ it follows that their standard will be of little use in our investigation which is essentially concerned with fixing a level of present-day poverty according to present-day ideas.

Following on the New London Survey, similar surveys have been made in other areas, the most important being that of the Merseyside. In all these surveys, however, the standard used was based on Rowntree's poverty standard or that adopted in the New London Survey.

Reference has already been made to the standards for food published by the Nutrition Committee of the British Medical Association and by Sir John Orr. Both these standards take account of the great increase in our knowledge of dietetics that has taken place in recent years, and so are much more reliable and more detailed than the food standards adopted in the earlier investigations of Rowntree and Bowley. They are described and compared in a later section of this chapter.

Finally, in 1935 an extremely interesting investigation was made by M'Gonigle and Kirby² into the budgets of 141 employed families in Stockton-on-Tees. The object of the inquiry was "to determine at what income level there appears a balance of money, after paying overhead charges, sufficient to enable the British Medical Association minimum diet to be purchased." Information was obtained as to the regular weekly expenditure on items other than food, and it was assumed that the whole of the balance of the family income was spent on food. Since no allowance was made for miscellaneous expenditure such as Trade Union subscriptions, newspapers, cigarettes and amusements, it is improbable that in actual fact the whole balance was spent on food.³

¹ *New Survey of London Life and Labour*, Vol. I, p. 11.

² M'Gonigle and Kirby, *Poverty and Public Health*, p. 193, *et seq.* Actually nearly twice this number of budgets was collected, but the remainder were rejected as being obviously incomplete or otherwise untrustworthy.

³ In their final comparison the authors do in fact make a small arbitrary allowance for these items, varying from 6d. per week in the lowest income group up to 1s. 6d. per week in the highest.

In spite of this defect, and of the fact that the B.M.A. minimum is a calculated one, it will be realized that this investigation approached far more nearly to a measurement of actual, as opposed to theoretical, poverty, than any of the previous investigations.¹ Furthermore, it is particularly interesting as being the first investigation to proceed on the basis that expenditure on food, so far from being the first charge on income, is more likely, at least within certain limits, to constitute the residual item. In addition, the results of the investigation provide us with extremely interesting and valuable data as to working-class expenditure on items other than food, clothing, shelter, and fuel and light. A more detailed examination of the data from this point of view is given in Appendix I.

We have now described the standards that have been used to measure poverty in the various inquiries and surveys that have been made from 1890 to the present day. We have not troubled to give the conclusions of these inquiries, partly because they refer only to the particular areas investigated and not to the country as a whole, but mainly because our immediate concern is with the methods used in constructing the standards and with the help they can give us in constructing standards applicable to conditions to-day. For the same reason, and also because changes in prices have rendered them misleading without adjustment, there is no point in quoting the money cost of all the different items composing the various standards; although some of them will be referred to in the third section of this chapter.

(2) *How Does the Worker Actually Spend His Income?*

It is clear from the description given above that the various standards used in previous inquiries have nearly all been concerned with the minimum cost of the minimum requirements—in other words they have been used to measure theoretical rather than actual poverty. In real life, as was pointed out in Chapter II, it is generally not possible to buy at minimum

¹ Except that of Sir John Orr.

prices, and some expenditure on items other than the bare necessities is unavoidable. In order to construct our own standards we must, therefore, examine some of the actual family budgets that have been collected at various times, so as to ascertain how the family income is *actually* spent, as opposed to the way in which it *ought* to be spent according to the poverty standards. We shall also find the results of this examination very useful later on when it will be necessary to make some assumptions as to the way in which the people in each of Sir John Orr's income groups spend their money.

To reproduce in the main text the various collections of budgets that are available would involve a large mass of statistics that is likely to prove wearisome to the ordinary reader who is not used to digesting tables of figures. We shall therefore summarize here the main conclusions to be drawn from a study of these budgets, and relegate to an appendix the actual tables themselves, together with more detailed comments thereon. In this way the reader who is content to take the conclusions on trust can skip a lot of boring detail, while the reader who prefers to check the conclusions for himself can do so at his leisure. The two main collections examined are those of the Merseyside Survey and of M'Gonigle and Kirby.

The analysis given in Appendix I shows clearly that there are many items entering into working-class expenditure which are not allowed for in the various poverty standards, but which should be allowed for in any standard which attempts to measure the amount of actual poverty existing according to present-day ideas of what is implied by that term. More detailed conclusions are difficult to draw, partly because of the small number of budgets available, and partly because they contain an undue preponderance of the budgets of unemployed families. The only collection which is composed of employed families is that given by M'Gonigle and Kirby, and even this relates almost entirely to families whose food expenditure is inadequate according to the B.M.A. standard. Nevertheless, in the absence of more extensive data, the following broad conclusions may perhaps be tentatively accepted.

Food. The percentage of income spent on food is less than that assumed in the Bowley and New London Survey standards. This percentage (about 55 per cent for the standard family) was probably about correct in pre-war days, but at the present time the percentage actually spent is probably nearer 45 per cent. In this respect Rowntree's Human Needs standard, which assumes a food expenditure of $42\frac{1}{2}$ per cent, is thus nearer the mark. This is approximately the percentage available for food in the budgets of employed families given by M'Gonigle and Kirby.

Rent. This appears to take between 15 per cent and 20 per cent of the income for all incomes except the lowest. Since rents are notoriously higher in London than elsewhere, the percentage figure for London should probably be higher also.

Clothing. The data in respect of clothing are difficult to interpret and are probably very incomplete. In the Merseyside budgets, for example, it is almost certain that the amounts spent on clothing have been understated. We can say broadly, however, that the percentage of income spent on clothing, unlike those for food and rent, increases rapidly with size of total income. In the lowest groups, especially among the unemployed, the percentage is extremely low. At the level of income corresponding to the Bowley and New Survey poverty standards the percentage spent on clothing approximates to that assumed in those standards, viz., about 10 per cent. As income increases beyond that point, so the percentage increases also.

Fuel and Light. In some of the budgets cleaning is stated separately (if it is given at all) from fuel and light, while in others fuel is given separately, and lighting and cleaning are lumped together. We shall probably not be far off the mark, however, if we say that at the New Survey poverty level fuel and light absorb about 10 per cent of the total income. The percentage is probably higher for incomes below the poverty level, and lower for those above it. Cleaning would probably account for a further 2 to 3 per cent.

Other items. As one would expect, the percentage of income that goes on miscellaneous items increases fairly rapidly as the total income goes up. In the case of incomes below the New Survey poverty level, except possibly for the very lowest, the miscellaneous items apart from State Insurance contributions and fares to and from work would appear to absorb about 10 per cent of the income.

The above considerations seem to point to the general conclusion that almost all families, however low their income, find themselves forced either by necessity or convention to spend some 10 per cent of their income on things which are not allowed for in the poverty standards, and that this expenditure is usually met by a reduction in the amounts spent on food and clothing. It follows that in any standard based on present-day conceptions of poverty these miscellaneous items should absorb at least 10 per cent of the total expenditure.

It may perhaps be argued that in the light of the budgets examined the proportion of income spent on clothing should be reduced below that assumed in the New Survey standard. In view, however, of the extremely stringent assumptions on which that standard was based (and also of the probability that the clothing expenditure in the budgets is understated) it appears far more reasonable to assume that poverty shows itself most directly in the amount spent on clothing and hence to raise rather than lower the standard in this respect.

(3) *A Minimum and a Reasonable Standard of Living Applicable to Present-day Conditions*

Having examined the poverty standards that have been used in previous inquiries and having compared the distribution of expenditure they assume with the way in which working-class families do actually spend their money, we can now proceed to the construction of our own standards.

(a) *Food.* This is the most important, although as we have already pointed out it is by no means the first, charge on the family income. In recent years a great deal of research into the question of nutrition has been carried out and as a conse-

quence our knowledge of the minimum dietetic requirements necessary to maintain health and efficiency is now much more extensive than it was in the days when Rowntree and Bowley constructed their poverty standards. It is now realized that it is not only a question of providing enough of the energy-producing foods, but that a sufficiency of the so-called "protective" foods—those containing the necessary vitamins and mineral salts—must be provided also.

The recent investigations which take account of this new knowledge have already been referred to. One is the investigation of the Committee set up by the B.M.A. in 1933 and the other is that of Sir John Orr recently published in his book *Food, Health and Income*.

The B.M.A. Committee was appointed "to determine the minimum weekly expenditure on foodstuffs which must be incurred by families of varying size if health and working capacity are to be maintained, and to construct specimen diets." The Committee first calculated the minimum dietetic needs of an adult man, "if health and working capacity are to be maintained." They came to the conclusion that the food purchased each day must be sufficient to provide 3,000 calories net (after allowing for an assumed wastage in cooking, etc., of 400 calories), to be obtained from 500 grammes of carbohydrate, 100 grammes of protein, and 100 grammes of fat. Since in their estimation women and children need fewer calories, they calculated their "equivalent man-value," i.e., the fraction of 3,000 calories needed by women and by boys and girls of different ages. In this way the total dietetic requirements, in terms of calories, proteins, carbohydrates and fats, could be estimated for families of different size and constitution. The final stage was to translate these requirements into actual foodstuffs so chosen as to provide also for the necessary vitamins and mineral salts—which was done by constructing specimen diets—and to estimate the cost of purchasing these foodstuffs.

The actual cost of this minimum diet in the summer of 1933, as estimated by the Committee, is given in Table II.

TABLE II

	<i>Cost per week in June 1933</i>		<i>Percentage of cost for male</i>	<i>Cost in 1934</i>	
	<i>s.</i>	<i>d.</i>		<i>s.</i>	<i>d.</i>
Male over 14	5	11	100	6	9½
Female over 14	4	11	83	5	8
Child 12-14	5	4	90	4	6½*
„ 10-12	4	9	80		
„ 8-10	4	2	71		
„ 6-8	3	7	60		
„ 3-6	3	5	59		
„ 2-3	3	1	54		
„ 1-2	2	8	47		

* Average, assuming an approximately equal number of children in each group.

Since 1933 the prices of foodstuffs have risen (even for that year the criticism was made that the estimated prices were too low). An inquiry made through the Labour Women's Advisory Councils in February 1934, covering twenty-two areas, showed that the B.M.A.'s diet for a family of husband, wife and three children, whose cost the B.M.A. estimated at 22s. 6½d. per week, actually cost between 23s. 6d. and 29s. 5d.¹ If we take 26s. 6d. as a mid-way figure, this represents an increase over the B.M.A. figure of 17 per cent. Since, however, these prices were collected in the winter, they were probably a bit above the average for the year (just as the B.M.A. prices, which were collected in the summer, were probably below the average for the year). We have therefore assumed that the average cost of the B.M.A. diet in 1934 was only 15 per cent above that given by the B.M.A. for June 1933.

The B.M.A. Committee set out to find the minimum expenditure which would "maintain health and working capacity," on the assumption that the cheapest kinds of food were bought, of just the kind and in just the amounts necessary to provide

¹ *Nutrition and Food Supplies*, p. 11, published by the Labour Party.

the required food-values, and prepared in the most economical fashion. Thus the housewife was assumed not only to make her purchases in the cheapest market and to waste nothing beyond the unavoidable minimum (a practically impossible task where, as is only too common, there is a lack of adequate facilities for storing food); but she was also assumed to have a thorough knowledge of modern dietetics! It was in fact a theoretical minimum which no housewife could hope to attain.

Sir John Orr, on the other hand, conducted his investigation from the opposite end. He examined samples of the actual food consumed by families at different income levels and determined how far they provided the essential constituents of an adequate diet. In this way allowance was made for the fact that actual and theoretical budgets might differ either in cost or composition or both. The standard chosen for this comparison was a diet such that "no improvement [in health] can be effected by a change in the diet."¹ It specifically provided for an adequate allowance of vitamins, calcium, phosphorus and iron.

Sir John Orr's grouping of families according to income per head has already been described. He found that as income per head increased both the amount spent on food and the dietetic adequacy of the food bought increased also. The food consumed in Group I was inadequate in all the constituents considered; in Group II it was adequate only in total proteins and fat: in Group III it was inadequate in minerals and vitamins. Groups IV and V were adequate in everything with the possible exception of calcium, while Group VI exceeded the standard requirements in every constituent.

Sir John Orr concludes that in the lower groups the people buy foods which will supply energy and satisfy hunger as cheaply as possible, such as bread, potatoes and margarine. As the income available increases the amount spent on these foods remains relatively constant but the amount spent on the more expensive foodstuffs, which provide the necessary minerals and vitamins, increases progressively. This seems to indicate that the failure to purchase these foods in the lower groups is due in the main not to ignorance but to poverty. A

¹ *Food, Health and Income*, p. 18. (2nd Edition.)

similar conclusion is reached by M'Gonigle and Kirby, who write:

The statement is frequently made that more advantageous spending of small incomes is possible and that much existing under-nourishment is due to ignorance of marketing and of food values, combined with lack of skill in cooking. Careful analysis of family budgets shows that such statements are, to a very large extent, wide of the mark.¹

Orr describes his standard as providing the "optimum" food requirements, in contrast to the minimum requirements discussed by the B.M.A. Committee. In actual fact, however, it would appear that the Stiebeling standard, which is the dietetic scale adopted by Orr, is lower than that of the B.M.A. Even Orr's Group IV, which is the first group whose food consumption reaches his standard in *all* respects, seems if anything to fall short of the B.M.A. standard. The following table, given by Mr. G. P. Crowden, illustrates this.²

TABLE III

Comparison of B.M.A. Diet 16, and Sir John Orr's Group IV

	<i>B.M.A. Diet 16</i>	<i>Group IV Sir John Orr</i>
Calories 	3423	3119
Protein, grams 	99	89.4
Fat, ,, 	106	120.6
Carbohydrates, grams ...	494	403
Calcium, grams 	1.03	0.71
Phosphorus ,, 	1.85	1.28
Iron ,, 	0.021	0.012
Vitamin A 	3884	4000
Vitamin C 	85	108
in Sherman Units		

¹ *Poverty and Public Health*, p. 193.

² *Food and the Family Budget*. A Report by the Engineers' Study Group on Economics, p. 34.

It seems safe to conclude that from the dietetic point of view the B.M.A. standard is not materially *lower* than Orr's Group IV, and it may possibly be higher. In any event the differences between the two are only slight. Sir John Orr did not calculate the cost of the diet necessary to supply his "optimum" food requirements, since his object was rather to discover at what level of income the food actually consumed satisfied these requirements. As already stated, Group IV was the first group whose food consumption was found to be adequate in all respects. It will be seen from Table IV that food expenditure in this group averaged 10s. per head per week. We may therefore take this as the sum necessary, having regard to the way in which people actually spend their money on food, to provide a diet which is fully adequate.

TABLE IV

<i>Group</i>	<i>Income per head per week</i>	<i>Estimated average expenditure on food</i>	<i>Cost of B.M.A. minimum diet at 1934 prices</i>
		<i>s. d.</i>	<i>s. d.</i>
I	Up to 10s.	4 0	5 5
II	10s.-15s.	6 0	5 7½
III	15s.-20s.	8 0	5 9½
IV	20s.-30s.	10 0	6 0
V	30s.-45s.	12 0	6 0
VI	Over 45s.	14 0	6 0

The last column in Table IV shows the cost of providing the minimum diet according to the B.M.A. standard, allowance being made for the differences in the composition of the average family in the various groups. (It has been assumed that the average family contains an equal number of males and females, and that the cost of a child under 14 on the B.M.A. scale is two-thirds of that of a male over 14.) From this it appears that expenditure on food in Orr's Group IV is about two-thirds greater than that considered necessary by the B.M.A.

In view of the similarity between the dietetic requirements of the two standards we are naturally led to inquire what is

the reason for the great difference in their cost, and the following reasons may perhaps be suggested. The cost of the B.M.A. diet was calculated on the assumption that the requisite food requirements were obtained in the cheapest possible way. To achieve this would require a knowledge of dietetics possessed only by specialists together with a capacity to reject all purchases but the essentials which even the specialists would probably not possess. It would also involve an alteration both in our present food habits and in our present food production. The B.M.A. diets provide, for example, for a consumption of cheese per head of more than twice, and of jams and syrups more than three times, that actually consumed; while butter on the other hand is only about one-half, and fish only about one-third, of the actual average consumption.¹ The adoption of the B.M.A. diets by the whole population, or even by the poorer 50 per cent of it, would thus require large changes in the relative amounts of the different kinds of food we consume, which in turn would produce considerable changes in relative prices. There is thus no guarantee that even if the required changes in food habits were carried out the food would still be obtainable at the prices assumed by the B.M.A.! This illustrates the danger of constructing specimen diets by choosing the cheapest foods available without seeing that the total quantities of the different types of food needed for these diets compares reasonably well with the total quantities which are actually available for consumption. If the working class as a whole attempted to conform to the B.M.A. diets, the effect would probably be to raise the price of cheese, produce a glut of butter and fish, and incidentally to make the present confusion in agriculture even worse confounded.

It is probably true that some improvement in nutritional value could be achieved without any increase in expenditure by a change in food habits, but its extent is usually greatly exaggerated. As we have already pointed out, Orr's analysis of the food consumption in the different income groups shows that as the income available for food increases so the amount spent on the more expensive protective foods increases also;

¹ For a fuller comparison, see pp. 50-51.

but this increase is in addition to, not in substitution for, the cheaper foods. The only foods which show any significant decrease as income goes up are condensed milk and margarine, for which fresh milk and butter are substituted. This confirms the experience of Dr. M'Gonigle, who says:

Contrary to popular belief, I find that the average working-class woman has a sound rule of thumb knowledge of practical dietetics (though no theoretical knowledge), and that to the limit of her purchasing power she buys food wisely and well.¹

We can only conclude, therefore, that the difference in the cost of the B.M.A. minimum and Orr's Group IV diet is due in the main to the fact that the B.M.A.'s specimen diets are theoretical and their cost is based on the lowest prices obtainable, while the cost of Orr's Group IV is based on the consumption of food actually available, bought at the prices people habitually have to pay. It follows that the Group IV food expenditure is far more appropriate to the construction of a present-day poverty standard than is the cost of the B.M.A. minimum diet. In accordance, however, with our decision in Chapter II to construct two standards, we shall adopt the B.M.A. diet for our minimum standard and the Group IV expenditure of 10s. per head for our reasonable standard.

(b) *Housing*. A housing standard is difficult to estimate, not because there is no expert and technical advice and guidance to help us, but because the standard of housing in the country is so low and adequate housing accommodation is so expensive that any estimate of the cost of a reasonable standard at once appears to be unreasonable.

Housing standards are also difficult because they cannot be so easily assessed on a cost per head basis. A family, no matter what its size, always needs separate cooking facilities and a living-room, etc., as well as a bedroom or bedrooms, and the cost of building a house for two is therefore nearly as high as of building a house for four or five. Moreover, we have to remember that in building it is not possible simply to have a minimum standard which can at some future date be ex-

¹ *Food and the Family Budget*, p. 37.

panded into a higher and more reasonable standard, as is the case with food and clothing. We must not, therefore, build houses blindly. Houses, by and large, are inadaptably, and, to some extent at any rate, the houses we build now will determine housing conditions in the future. We are suffering to-day for this lack of foresight on the part of our parents, and we do not want to leave a similar heritage to our children. We do not want to perpetrate the huge family mansion, so beloved of the Victorian family in the latter part of last century, which has now deteriorated into the tenement dwelling for several families all sharing one or (at most) two water taps and lavatories, with no adequate cooking or washing facilities and with one or more persons sleeping in the room used as a living-room.

The housing question has been the subject of continual discussion and legislation since the end of the war, culminating in the 1930 and 1935 Housing Acts, which are now the basis of assessing overcrowding and re-housing. According to the 1935 Act a room of 110 square feet or more can sleep two persons, a room of 90-110 square feet $1\frac{1}{2}$ persons and a room of 70-90 square feet 1 person, while a house of one room is suitable to accommodate two persons; two rooms, three persons; three rooms, five persons; and four rooms, seven and a half persons. (A child between the ages of 1 and 10 years counts as half a person and a child under the age of 1 does not count at all.) After that, two persons per room are allowed, but in all cases the rooms must be large enough to sleep the persons according to the above rules. In practice, this standard works out at roughly one and a half persons to a room, since the sexes have to be separated at ten years of age.

The only drawback to these regulations is that they do not provide that each family should have a separate living-room, and other facilities of their own, so that more often than not one or more of the family has to sleep in the room used as a living-room, which is also quite often the kitchen and scullery too. In the 1930 Act, however, it is laid down that every family must have a separate living-room, bathroom and lavatory, separate cooking facilities and scullery, and separate

food and fuel storage. These two Acts combined, therefore, make a very adequate minimum standard. Nobody will deny that the family needs all these separate facilities and few will claim that a rough average of one and a half persons per room is too few. In the case of single person families, however, we have felt that it was not necessary to allow for a separate living-room.

Moreover, we have further indications of what the Ministry of Health considers adequate housing accommodation in its Housing Manual published in 1927. Here suggestions are made to Local Authorities and private builders who wish to qualify for a government grant under the 1925 Act. It takes the three-bedroom house or flat as being the typical requirement of the average family in Great Britain, and suggests that, apart from the bathroom, scullery, etc., the living-room should be about 180 square feet, the first bedroom (for the parents) about 150 square feet, the second bedroom 100 square feet and the third 65 square feet. It will thus be seen that our minimum, based on the 1930 and 1935 Acts, is not as high in respect of the size of the rooms as the standard deemed to be adequate by the Ministry of Health.

For the reasonable standard, we suggest that the number of bedrooms should be left unaltered but that a living-room should be allowed to single-person families and an additional living-room to families of more than two persons. Our minimum standard allows for separate cooking facilities but not for a separate kitchen, which means that a single room has to serve for living, eating and cooking. It is highly desirable, on hygienic grounds alone, that the cooking of meals should not take place in the room used for general living purposes, since the steam and the smells inseparable from the preparation and cooking of meals tend to render the atmosphere not only unpleasant but unwholesome. There is also a great deal to be said for separating the general living-room from the dining-room, especially in the case of families with several children. The provision of an extra living-room, which can be used as a kind of kitchen-cum-dining-room, enables the preparation and partaking of meals to be completely separated from the other

activities of the family. We think it will scarcely be denied that such a separation must be considered essential to a reasonable standard of life.

We have approached this question so far from the angle of accommodation. The problem of cost must now be settled. It has been shown by the social surveys of London and the Merseyside that the rent of one room alone is about 4s. 10d. in Merseyside and 5s. 2d. in London; over one room, the average rent per room is about 2s. 6d. in Merseyside and also in Southampton, and 3s. to 4s. in London. At the present time, houses of four rooms can be built to let at an economic rent of about 2s. 6d. per room, but this may easily rise in the near future, as interest rates go up, to 3s. 6d. per room. Table V shows the rent that would have to be paid (1) on our minimum standard of approximately $1\frac{1}{2}$ persons per bedroom and one separate living-room per family, and (2) on our reasonable standard of $1\frac{1}{2}$ persons per bedroom and two living-rooms per family (for families of more than two persons). Since rent varies, not only with the number and size of rooms, but also with the general character and situation of the house, we shall be justified in taking a slightly higher rent per room for our reasonable standard than for our minimum. On this basis Table V shows that, since the average family in our groups is round about four persons, we may take the cost of houseroom as 2s. 6d. per head for our minimum and 3s. 9d. per head for our reasonable standard.¹

Our standards may perhaps be criticized on the ground that the number of persons allowed per bedroom is too low, especially in the case of families containing several children. We may answer, in the first place, that the size of the rooms is assumed to be only about 100 square feet, and that, if we increase the number of persons per bedroom, we should have to increase the size of the rooms also, with a corresponding increase in the rent paid per room. Secondly, the average family in Group I

¹ In his 1937 edition of *The Human Needs of Labour*, Rowntree estimates the rent of a three bedroom non-parlour house (i.e. four rooms in all) at 9s. 6d. per week. This compares with 10s. per week for four rooms on our minimum standard.

TABLE V

<i>Number in Family</i>	<i>Number of Rooms</i>	<i>Rent at 2s. 6d. per room</i>	
		<i>Total Rent</i>	<i>Rent per Head</i>
		<i>s. d.</i>	<i>s. d.</i>
1	1	2 6	2 6
2	2	5 0	2 6
3	3	7 6	2 6
4	4	10 0	2 6
5	4	10 0	2 0
6	5	12 6	2 1
		<i>Rent at 3s. 0d. per room</i>	
1	2	6 0	6 0
2	2	6 0	3 0
3	4	12 0	4 0
4	5	15 0	3 9
5	5	15 0	3 0
6	6	18 0	3 0

N.B.—The above table does not allow for any reduction in the number of rooms required where the family contains children under 10, but as against this no allowance is made for the fact that some rooms would be smaller than the 100 square feet required by the 1935 Act.

contains only two children, while in all the groups except the first there are, on the average, three adults to the family; therefore, if allowance is made for separation of the sexes at 10 years the standards adopted would not appear to be unduly high. It is only in families containing a large number of young children that they can reasonably be exceeded, and such families nowadays cannot be regarded as typical.

(c) *Clothing*. We cannot state with the same precision as for food what a minimum or reasonable amount of clothing is. No scientist has yet come forward to define what the average Englishman or Englishwoman or child requires in the way of clothing to dress comfortably in a varying temperature—to keep warm in the winter and cool in the summer—and in general to maintain health together with that appearance of respectability which we have come to accept as a part of our social life. It follows that any estimate of the minimum cost of

clothing must depend to a considerable degree on personal judgment. We propose basing our own minimum on that made by Rowntree in estimating his "Human Needs" standard. Rowntree estimated that in 1914 it cost 1s. 9d. a week to clothe a man, 1s. for a woman and 9d. for a child. At 1934 prices (85 per cent above the 1914 level), these amounts come to 3s. 3d., 1s. 10d., and 1s. 4½d. per week. In his new edition, Rowntree revised his estimates to 3s. a week for a man, 1s. 9d. for a woman, and 1s. 1d. for a child. His 3s. was obtained, however, by ruling out some of the higher individual estimates he received, and the average of the nine returns that he gives as samples of those on which his estimate was based actually works out at 3s. 4½d. There would, therefore, appear to be no valid reason for reducing the estimates below the adjusted 1914 figures.

Should we make any alteration to these figures? Obviously there is a strong case for increasing the woman's allowance to equal that of a man. Since 1914 women have taken a wider part in the life of the country; they have gone into industry, commerce and the professions and have, mainly as a result of this, developed far beyond the 1914 level in both their style of dress and their desire for new clothes. The London and the Merseyside Social Surveys allow a woman a third more for clothes than a man in their poverty standard. It is true that Rowntree in his revised estimate has retained a lower figure for women than for men, but it must be remembered that his figure refers to the cost for a married woman. For a single woman, whose "prospects of making a satisfactory match depend to a considerable extent upon her ability to dress attractively,"¹ he actually allows 5s. 3d.! If, therefore, we take as our minimum 3s. 3d. a week for a man or woman, and 1s. 4½d. for a child, we shall not be overestimating the cost of maintaining what Rowntree deemed "necessary to keep the body warm and dry, and to maintain modest respectability." The lowness of the figures will become more apparent when it is realized that they amount only to £8 9s. 0d. a year for a man or woman and £3 12s. 0d. for a child.

¹ *The Human Needs of Labour*, p. 119.

In 1934 we spent as a nation some £400 million on clothes. This amounts only to £8 18s. 0d. per head of the population per year, or 3s. 5d. per week, which is approximately 20 per cent above the cost of the Human Needs standard. It follows that the poorer half of the population must spend considerably less than this on clothing, and indeed we have already had occasion to comment on the smallness of this item in working-class expenditure. It will be remembered also that we found that expenditure on clothing increased very rapidly as total income increased.

The conclusion must therefore be, not that our minimum standard is too high, but that the average standard of clothing prevailing among the working class is appallingly low and urgently needs raising. That this low standard is quite unnecessary in the sense that it is not caused by any lack of productive capacity is evidenced by the extreme depression and unemployment that has afflicted the textile trades in the post-war years. We shall deal with this aspect of the question in greater detail in a later chapter.

If it is difficult to obtain agreement as to a minimum standard of clothing, how much more difficult is it to estimate a reasonable standard which will command general assent. It is clear that our minimum standard allows the purchase of only the cheapest kinds of clothing, and we can therefore allow for some improvement in quality in our reasonable standard. Nor does the minimum allow for the purchase of any clothes other than those absolutely necessary for decency according to current conventions. It will be remembered that Rowntree based his estimate on inquiries among men and women who knew from first-hand experience at how low a cost it is possible to clothe a family. Our reasonable standard should therefore allow of an increase in the range and variety of the clothes purchased. A precise estimate of the increase in cost necessitated by these considerations is not possible, but if we allow for an increase of 50 per cent over our minimum standard we shall not be overestimating what is reasonably required. Our reasonable standard will then be 4s. 10½d. per week for an adult or 2s. 1d. for a child—surely not a very extravagant standard.

Table VI shows the cost per head of the minimum and reasonable standards respectively, allowing for the varying family composition in the different income groups.

TABLE VI

Group	Income per head per week	Cost per head per week for Clothing on:—	
		Minimum Standard	Reasonable Standard
		s. d.	s. d.
I	Up to 10s.	2 4	3 6
II	10s.—15s.	2 7	3 10½
III	15s.—20s.	2 9½	4 2
IV	20s.—30s.	3 0	4 6
V	30s.—45s.	3 0	4 6
VI	Over 45s.	3 0	4 6

(d) *Fuel and Light.* In his investigations at Stockton-on-Tees, Dr. M'Gonigle found that the cost of fuel and light in the different income groups varied between 3s. 5¼d. and 6s. 2d. per week per family, with an average of 4s. 9¾d.¹ The budgets he investigated were collected in the summer, and he estimates that the cost in winter may be increased by between 50 per cent and 100 per cent. He also found that the cost of fuel and light in the summer months in a Council house, fitted with electric light and with gas as a supplementary means of cooking, was about 5s. a week. If we assume that the average cost during the whole year is about 25 per cent above the cost in the summer months, this figure will be increased to 6s. 3d. per week, while the budget minimum and maximum figures will be increased to 4s. 3½d. and 7s. 8½d., and the average to 6s. (It must be remembered that only in the highest of his income groups is the balance of income available for food adequate on the B.M.A. standard.)

The difficulty next arises of reducing these to a "per head" basis. The average size of the families included in Dr. M'Gonigle's investigation is over five persons, considerably

¹ See Appendix I, p. 288.

above the average in even the lowest of Sir John Orr's groups. On the other hand, the cost of fuel, especially for heating, does not increase proportionately with the size of the family, so that the cost per head will tend to be higher the smaller the size of the family. We, therefore, suggest taking 1s. per head per week as the cost of fuel and light for our minimum standard, and 1s. 8d. per head as the cost for our reasonable standard. The former is approximately the same as Rowntree's Human Needs standard,¹ while the latter is the same as that assumed by the International Labour Office in their comparison of the working-class cost of living in different countries.²

(e) *Miscellaneous*. Finally we come to the last and most difficult task involved in deriving our standards—a consideration of that omnibus item which appears in family budgets under the title of “miscellaneous.” We have here to make allowance for all those varied items of family expenditure—recreation, household utensils, insurance, small items of personal expenditure, and so on—which have so far not been considered. It is the amount available for “miscellaneous” expenditure which goes far to determine whether a family is “living” or merely “existing” and it is a matter of extreme difficulty to know how much one should allow under this heading in determining either a minimum or a reasonable standard.

We concluded in Chapter II that some allowance under this head must be considered essential, since, quite apart from inevitable expenditure on household sundries, State Insurance and fares to and from work, there are other miscellaneous charges on the family income, which, in actual practice, are met even at the expense of reducing the amount available for food; and, in Chapter IV, we found that even in the poorest families these miscellaneous charges amount to about 10 per cent of the income. How much should be allowed in a minimum standard for this purpose? We have already seen that

¹ In his new edition Rowntree estimates the cost of fuel and light at 4s. 4d. per week for a family of five.

² *Contribution to the Study of International Comparisons of Cost of Living*. International Labour Office, 1932.

in 1936 Rowntree allowed 1s. 8*d.* for household sundries and 9s. for personal sundries. This figure was arrived at as the result of a large number of inquiries and was “the lowest sum that I would include in my budget for personal sundries.”¹ It was supposed to be the amount appropriate for a married man with a wife and three children, but, in fact, more than half the expenditure allowed for was assumed to be spent by the man and so was independent of the size of the family. Furthermore, the average family contains fewer children and more adults than the family for which Rowntree’s standard was constructed. We cannot, therefore, use his figure as it stands, although the individual items of which it is composed are useful as a guide.

In their account of the Stockton-on-Tees inquiry M’Gonigle and Kirby give the miscellaneous items of expenditure in considerable detail.² On the basis of this material, together with that given by Rowntree and the Merseyside Survey, we suggest the following figures as providing a “minimum” and “reasonable” expenditure per head respectively.

<i>Item</i>						<i>Minimum</i>	<i>Reasonable</i>
						s. d.	s. d.
Insurance	...	...	...	...	...	4	6
Medical	...	...	...	...	...	2	4
Household utensils and cleaning materials						4	8
Furniture etc. purchased on the Hire							
purchase system	...	...	...	...	...	4	8
Travel to and from work	...	...	...	...	...	6	6
Unemployment and Health Insurance,							
Trade Union, and other subscriptions						9	1 0
Amenities and recreation	...	...	...	...	...	6	1 0
Holidays	...	...	...	...	...	—	1 0
Total						2 11	5 8

It will be seen that the “minimum” figure of 2s. 11*d.* per head amounts to 11s. 8*d.* for a family of four, as compared with Rowntree’s estimate of 10s. 8*d.* for a family of five on the

¹ *The Human Needs of Labour*, p. 99.
² See Table XXX in the Appendix, p. 288.

"Human Needs" standard. The "reasonable" figure compares very closely with the miscellaneous, medical and insurance expenditure for a working-class family in Manchester in 1931, as estimated by the I.L.O. in their international comparison, which works out at 5s. 10d. per head. It seems therefore that 2s. 11d. and 5s. 8d. per head per week can safely be taken as minimum and reasonable miscellaneous expenditures. In actual fact, as will be realized from the detailed figures given above, the "reasonable" expenditure has been estimated very conservatively, and it is not pretended that it is really adequate for a full and satisfactory life. We think it best, however, to err on the side of understatement, so as to avoid the ignorant and unimaginative criticism of those who blandly assume that the great majority of people can lead a completely harmonious and satisfactory life on an income only a fraction of that which they themselves enjoy. Most readers of this book, if they compare their own expenditure with that assumed above, will probably consider our estimate of "reasonable" expenditure unreasonably low.

(4) *The Cost of the Standards and the Number of People Living Below Each*

We are now in a position to add together the cost of the various items making up our budget and so find the total cost per head of our minimum and reasonable standards. The following table sets this out separately for each of Orr's income groups. It is necessary to find the cost separately for each of the groups because the cost of some of the items varies with the composition of the average family, which is different in each group. The last column shows the approximate percentage that each item forms of the total cost.

It is clear from this table that Group I and the bulk of Group II fall below both our standards; Group III and part of Group IV are above our minimum but below our reasonable standard; while Groups V and VI are well above both standards. Since 14s. 7½d. (our minimum for Group II) lies at a point 92½ per cent of the way between 10s. and 15s. we shall probably

TABLE VII

A. Weekly Cost of Minimum Standard per head

<i>Group Actual income per head</i>	<i>I up to 10s.</i>	<i>II 10s.—15s.</i>	<i>III 15s.—20s.</i>	<i>IV—VI 20s.—</i>	<i>Proportion of total cost</i>
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>%</i>
Food	5 5	5 7½	5 9½	6 0	38
Housing	2 6	2 6	2 6	2 6	17
Clothing	2 4	2 7	2 9½	3 0	18
Fuel and Light	1 0	1 0	1 0	1 0	7
Miscellaneous	2 11	2 11	2 11	2 11	20
Total	14 2	14 7½	15 0	15 5	100

B. Weekly Cost of Reasonable Standard per head

<i>Group</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV—VI</i>	<i>Proportion of total cost</i>
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>%</i>
Food	10 0	10 0	10 0	10 0	40
Housing	3 9	3 9	3 9	3 9	15
Clothing	3 6	3 10½	4 2	4 6	16
Fuel and Light	1 8	1 8	1 8	1 8	7
Miscellaneous	5 8	5 8	5 8	5 8	22
Total	24 7	24 11½	25 3	25 7	100

be not far wrong if we take 92½ per cent of Group II as being below our minimum and 7½ per cent as being above, on which basis the total number of people living below our minimum is about 12,800,000, or 28 per cent of the total population. Sir John Orr estimated that the average amount per head spent on food in Group II was 6s. a week, whereas our minimum only allows for a food expenditure of 5s. 7½d. It is probable, therefore, that the whole of Group II falls below our minimum standard so far as expenditure apart from food is concerned.

We must now estimate the number of people living below our reasonable standard. Sir John Orr states with regard to

Groups IV and V that "further analysis of the available material suggests that the two 5s. ranges between 20s. and 30s. may, however, embrace as much as 27 per cent of the total population (17 per cent between 20s. and 25s., and 10 per cent between 25s. and 30s.), while the next three sub-divisions, from 30s. to 45s. may comprise only 15 per cent."¹ Why he did not alter his groups accordingly is not quite clear, but apparently he did not think it worth while as "the average expenditure upon food and the consumption of individual foods in these two groups would not be materially affected by this alteration."² Since Sir John Orr was only concerned with expenditure on food this procedure was quite legitimate, but clearly when we are considering total expenditure we cannot afford to ignore this further analysis. We shall therefore take 18 per cent of the total population as being the number of people in Group IV who fall below our reasonable standard (17 per cent between 20s. and 25s. and 1 per cent between 25s. and 30s.)—or a total of 8,000,000 people. The total number in all Groups below this standard is therefore 30,500,000, or just over two-thirds of the whole population.

Since the lower income groups contain a proportionately larger number of children than the higher groups, a larger percentage of the children will fall below our standards than of the population as a whole. We have shown above (Table I) the number and percentage of children in each of the income groups. On the bases used above it appears from this table that 5,200,000, or practically 50 per cent, of the children under 14 are in families which are below our minimum; and 8,800,000, or 83 per cent, are in families under our reasonable standard.

To sum up, we may conclude broadly that about one-quarter of the total population, and half the children, are living in families below our minimum standard; while two-thirds of the population, and five-sixths of the children, are living in families below our reasonable standard: the standards themselves being approximately 14s. 6d. and 25s. per head per week respectively.

¹ *Food, Health and Income*, p. 65. (2nd Edition).

² *Op. cit.*, p. 66. (2nd Edition).

CHAPTER V

PLENTY ON THE BASIS OF EQUALITY OF INCOMES

WE have so far been concerned with constructing our minimum and reasonable standards and with estimating the number of people who fail to reach these standards. We have, that is to say, been concerned with the problem of measuring the extent of existing poverty, and we have found it to be far more widespread than is generally realized. The question now inevitably arises: Is this poverty really necessary? How far is it due to lack of natural resources and how far is it due to maladjustment or waste in our social and economic arrangements?

To answer this we may first examine the question as to whether the existing national income would suffice to provide everybody with our minimum or reasonable standard if it were equally distributed. Mr. Colin Clark has estimated that in 1934 the social income (i.e. the income after deducting national debt interest and pensions) amounted to £79¹ per head, or just over 30s. a week. The national income in 1934 would thus have sufficed to provide our reasonable standard for everyone if it were equally distributed, and to leave between £550m. and £600m. over to provide for capital development or for a further raising of the average income.

Now it may well be that the total national income expressed in terms of money is more than adequate to provide our reasonable standard for everyone, while at the same time it is inadequate in terms of real things, because the goods at present being produced are not of the right kind. How much are we at present producing of each of the different kind of goods included in our budgets? Unfortunately we cannot answer this question completely, particularly in the case of the various kinds of goods included in our miscellaneous expenditure. The

¹ *The Economic Position of Great Britain*, A. C. Pigou and Colin Clark, p. 18.

most complete information available is in respect of food, so we will consider this first.

Sir John Orr gives the average expenditure on food in 1934 as 9s. per head. This is considerably more than the expenditure necessary on our minimum standard, but falls short of our reasonable expenditure by about 10 per cent. The actual quantities consumed per head per week, together with those required on our minimum and reasonable standards, are shown in the following table.

TABLE VIII

Average Weekly Consumption per head of Certain Foodstuffs compared with those Required on the Minimum and Reasonable Standards

<i>Foodstuff*</i>	<i>Minimum*</i>	<i>Reasonable†</i>	<i>National Average‡</i>
Bread (ozs.)	99.1	67.0	66.0
Potatoes (ozs.)	65.5	57.0	56.0
Milk (pints)	2.1	3.6	3.6
Butter (ozs.)	3.6	8.5	7.8
Fruit (pence)	} 7.9	9.5	9.0
Vegetables (pence)		5.2	4.6
Meat (ozs.)	35.9	41.5	38.2
Fish (ozs.)	3.3	10.4	8.9
Margarine (ozs.)	—	2.0	2.5
Cheese (ozs.)	6.6	3.6	3.0
Lard and Suet (ozs.)	3.9	4.4	3.9
Jam, syrup, etc., (ozs.)	15.7	5.4	5.2
Sugar (ozs.)	14.4	19.0	17.8

* The minimum figures have been obtained by weighting the diets given by the B.M.A. for adults and for children of different ages according to the number of persons in the different age groups in the total population. For women and children over 10 the B.M.A. equivalent man-values have been used.

† The reasonable figures are calculated from the actual consumption of Orr's Group IV.

‡ These are the figures given by Sir John Orr as the weighted averages of his income groups, and are thus exclusive of waste in distribution, etc.

It would appear that the reasonable standard is slightly in excess of the national average for most of the items given in the table; but only in the case of vegetables, fish, cheese, and

lard and suet is the excess greater than 10 per cent. In the case of one item only, namely cheese, is it greater than 20 per cent. Broadly speaking, therefore, we may say that the table confirms the conclusion just reached that an equal distribution of our existing food supplies would suffice to provide a standard falling short of our reasonable standard by approximately 10 per cent.

When we turn to compare the national average with our minimum standard, we find that while existing production shows a considerable excess in milk, butter, fruit and vegetables, and fish, it is very deficient in bread, potatoes, cheese, and jams and syrups. To provide everyone with the minimum therefore would require not only very large increases in the production of some foodstuffs (e.g. 50 per cent in the case of bread, and 200 per cent in the case of jams and syrups), but also considerable changes in the *direction* of existing production. The minimum standard is thus more of a theoretical than a practical one.

The other items of expenditure can be dealt with more quickly. Total expenditure on rent and rates in 1934 was approximately £380m.,¹ or say 3s. 3d. per head per week, which is just over half-way between our minimum and reasonable standards. For various reasons, some of which will be discussed later, housing cannot really be treated on these lines and it is doubtful if this figure has any real significance.

The expenditure on clothing in 1934 was about £400m., or 3s. 5d. per person per week, which is above the minimum standard but falls considerably short of the reasonable. We shall see in the next chapter that the increases necessary to bring everybody up to our standards are greater for clothing than for any other item. In fact, one of the conclusions that emerges most clearly from our investigation (and one that was not foreseen when the investigation was first started) is the extraordinarily low standard of clothing of the majority of the population, in spite of the great increase that has taken place (especially in London) since the war.

The total expenditure during 1934 on fuel and light was about £150m., which is equivalent to just over 1s. 3d. per person

¹ See note to Table XI on p. 55.

per week. This again falls short of our reasonable standard, although it is considerably greater than our minimum.

The total miscellaneous expenditure in 1934 cannot be ascertained with the same degree of accuracy as it is made up of a large number of different items, and the total largely depends on what we include in the term "miscellaneous." If we take it to include all expenditure less the amounts spent on the items already considered and on direct taxation, we get a figure of approximately £1600m., which is equivalent to 13s. 8d. per person per week, or more than twice the amount required on our reasonable standard.

Expressed in terms of money, therefore, we can produce more than enough to provide everyone with our reasonable amount of miscellaneous goods and services. It is unfortunately not possible to go into the matter in more detail, or to say whether we are at present producing enough of those particular goods and services which would be consumed by people possessing our reasonable income. (The £1600m. mentioned above obviously includes a fair number of luxury goods and services which would be beyond the reach of such an income.) In view, however, of the non-specific nature of much of the miscellaneous expenditure, and of the ease with which it is adapted to the goods currently available, it is probable that existing production would suffice to provide the required goods and services.

CHAPTER VI

THE INCREASES IN INCOME AND PRODUCTION NECESSARY TO ACHIEVE THE MINIMUM AND REASONABLE STANDARDS

(1) *Money Incomes*

WE have so far been concerned with the extent to which the existing national income would suffice to provide our minimum and reasonable standards if it were equally distributed. The results, though interesting, have little practical significance because no political party or group, with the exception of Mr. Bernard Shaw, advocates complete equality of incomes; nor could such equality be obtained without such drastic changes in the social and economic structure as would completely invalidate our calculations. A more useful approach, and one more in keeping with the purpose of this inquiry, will be to estimate the increases in income and production necessary to bring those persons up to our standards who are at present living below them, on the assumption that incomes above the standards remain undisturbed. We can then compare the results directly with those of the investigation into unused productive capacity which we shall make in the next chapter. The question as to whether it will be possible permanently to utilize the excess capacity in this way without affecting the higher incomes must be left for discussion at a later stage.

Dealing first with total incomes Table IX shows the increases necessary to bring each of Orr's income groups up to our minimum and reasonable standards. This means that the social income in 1934, which was approximately £3600m., would have had to be increased by 3 per cent and 20 per cent respectively to bring everyone up to our minimum and reasonable standards.

TABLE IX

Income Group			Increase per annum necessary to provide the standard (in £m)	
			Minimum	Reasonable
I	...	...	64	186
II	...	...	50	292
III	...	...	—	182
IV (1)*	...	...	—	62
			—	—
Total	...	...	114	722
			—	—

* This is the 20s. to 25s. group, which Sir John Orr estimates to contain 17 per cent of the total population. The very small number in the 25s. to 30s. group who are below the reasonable standard have been ignored.

The next step is to find out how these increases in total income should be made up: in other words, we have to find the corresponding increases in the separate items that go to make up the total budget. Unfortunately, Sir John Orr does not give us any information as to the way in which the income in his various groups is spent, except in the case of food. We have therefore been forced to assume a distribution of expenditure for each group arrived at after consideration of the distributions in the various collections of family budgets examined in Appendix I. For food the average amounts given by Sir John Orr for each group have been used. The distributions assumed are shown in Table X.

TABLE X

Group	I			II			III			IV (1).		
	s.	d.	%	s.	d.	%	s.	d.	%	s.	d.	%
Food ...	4	0	46	6	0	48	8	0	46	9	0	40
Housing ...	1	11	22	2	6	20	3	2	18	3	9	17
Clothing ...	10	½	10	1	3	10	2	1	12	3	6	16
Fuel and Light	10	½	10	1	3	10	1	5	8	1	8	7
Miscellaneous ...	1	1	12	1	6	12	2	10	16	4	7	20
Total ...	8	9	100	12	6	100	17	6	100	22	6	100

We are now in a position to calculate the increases in the various items necessary to bring each group up to our standards. Table XI shows these for all the groups together and compares them with the actual expenditure for the whole country in 1934. (The increases in the different items for each group separately are shown in Appendix II.)

TABLE XI

	<i>Actual Expenditure in 1934*</i>	<i>Increase required to achieve:</i>			
		<i>Minimum Standard</i>		<i>Reasonable Standard</i>	
	<i>£m.</i>	<i>£m.</i>	<i>%</i>	<i>£m.</i>	<i>%</i>
Food	1075	19	2	231	21
Housing	380	10	3	65	17
Clothing	400	65	16	161	40
Fuel and Light	150	1½	1	25	17
Miscellaneous	1600	59½	4	240	15
	—	—	—	—	—
Total	3605	155	4	722	20
	—	—	—	—	—

* These figures are based on a number of estimates made by Mr. Colin Clark for various dates.

At first sight it may seem strange that the total of the increases in the individual items necessary to achieve our minimum standard should be £155m., while the increase in total incomes is estimated at only £114m. A little reflection, however, will show that this is not really unreasonable. A family may have a total income sufficient to provide our minimum standard, but unless the money is spent in exactly the same way as is assumed in the standard the family will fall below it in some respects, though it will be above it in others. If we are simply concerned with total income, the family has achieved our minimum standard and we do not have to provide for any increase. If, however, we are concerned that every family shall achieve our minimum standard, not only in respect of total income, but also in respect of each of the main items of expenditure, then we have to provide for an increase in respect of those items on which the family's expenditure is deficient.

For example, our minimum standard allows for an ex-

penditure on food in Group II of 5s. 7½d. per head, but the families in this group actually spend on the average 6s. per head. The total income of these families averages 12s. 6d. per head, which is practically 2s. below our minimum. Since they spend 4½d. more on food than is allowed for in the minimum, they must spend a corresponding amount less on other items. The desired increase in other items to attain the minimum is thus increased by this amount, but on the other hand we do not make any *deduction* to allow for the excess expenditure on food. It follows that the sum of the increases in the individual items will exceed the increase obtained by comparison of the total income with the total necessary to provide our minimum by at least the equivalent of 4½d. per head.

Similarly in Group III the average income exceeds that necessary to provide our minimum by 2s. 6d. per week, so that on a comparison of total income all the families in this group are above the minimum standard. Nevertheless, their average expenditure on clothing is only 2s. 1d. per week, which is 8½d. below that necessary to reach our minimum standard. In considering individual items, therefore, we shall have to provide for an increase in clothing expenditure in this group, although their total expenditure is well above the minimum.

Anomalies of this sort are inherent in the use of a theoretical standard. In the present case the discrepancy is due in the main to two items, fuel and light and food, in both of which the actual expenditure in Group II is in excess of that assumed in our minimum standard. In the case of fuel and light it is possible that we have assumed too high an actual expenditure in Group II on this item. For the food expenditure, however, we have taken the figure given by Sir John Orr, and the discrepancy confirms the view already put forward that the B.M.A. Committee have under-estimated the cost of their dietetic requirements. So far as the reasonable standard is concerned these anomalies do not arise. In the case of two items, housing and fuel and light, the average actual expenditure is the same as that necessary to provide our reasonable requirements. This means that some families in Group IV (1) spend less than the reasonable amounts, these being offset by

others who spend more. Theoretically, we should provide for an increase in the expenditure on these items of these less fortunate families, but the amounts involved are relatively so small that we have decided to ignore them. In the case of the reasonable standard, therefore, the sum of the individual increases is the same as the increase obtained by comparing the total incomes with the reasonable standard.

We have now obtained the increases in the different items necessary to achieve our standards, expressed in terms of money. In the case of two items, however, food and housing, we can carry the process a stage farther, and estimate the necessary increases in terms of physical quantities. This is particularly necessary in the case of housing, since, for reasons which will be explained later, figures showing the increased weekly expenditure on housing accommodation give a very inadequate idea of the number of new houses required to achieve our standards, which is what we really want to know.

(2) *Physical Quantities*

(a) *Food.* Sir John Orr has given the increase in consumption necessary to bring each of his income groups up to the level of the one above it in respect of each of the chief items of food. The table below, the figures in which are extracted from his larger table, shows the increase in total consumption necessary to bring all the families in Groups I to III up to the level of Group IV.

In connection with this table, it should be noted that the figures give the increase required as a percentage of *total* consumption, *not* as a percentage of the consumption in Groups I to III. An interesting feature of the table is the decline in the quantity of margarine that would be consumed as a result of raising the food expenditure of the lower groups. Expressed as a percentage of total consumption, the decline in the consumption of margarine is considerably greater than the increase in that of butter. In absolute amounts, however, the increase in the quantity of butter is considerably greater than the reduction in the quantity of margarine consumed. The

TABLE XII

*Percentage Increase in Total Consumption needed to bring
Groups I to III up to the level of Group IV*

						Increase %
Milk ...	...	...	...	...	...	16
Butter ...	...	...	...	...	...	15
Cheese ...	...	...	...	...	...	17
Eggs ...	...	...	...	...	...	18
Fruit* ...	...	...	...	...	...	25
Vegetables (excluding potatoes) ...	...	...	...	...	...	25
Fish ...	...	...	...	...	...	25
Meat ...	...	...	...	...	...	12
Sugar (all forms) ...	...	...	...	...	...	8
Margarine ...	...	...	...	(decrease)	...	26

* Based on expenditure: the increase in quantity would not necessarily be the same.

apparent discrepancy arises from the fact that the total consumption of butter is over three times as great as that of margarine, so that a reduction of a given amount in the quantity of margarine consumed represents a much greater percentage change than does an increase of the same amount in the consumption of butter.

In addition to the items given in the above table, small increases in the amounts of tea, potatoes, lard and suet would be required. These would be confined almost entirely to Group I, the consumption of Groups II and III being very nearly adequate for these items.

When we come to consider the increases necessary to achieve our minimum standard, we are faced with the difficulty that we have met earlier on; namely, that the diets proposed by the B.M.A. Committee are so grossly at variance with actual consumption, that a complete change in food habits would be required if they were to be generally adopted. Group I has a diet which is inadequate in respect of every constituent as compared with the B.M.A. diet, while that of Group II is inadequate in the case of meat, lard and suet, bread, tea, potatoes, cheese, jams and syrup. With the exception of meat and lard, however, *all* the groups are inadequate in

respect of these items. Thus the B.M.A. diets provide for a consumption of 99 oz. of bread per head per week, as compared with an actual consumption of 67 ozs. in Group IV, 60 ozs. in Group VI, and a national average consumption of 66 ozs. In the case of potatoes the B.M.A. figure is 66 ozs., as compared with 57 ozs. in Group IV and 56 ozs. in Group VI; while in the case of cheese the figures are 6·6 ozs. on the B.M.A. diet, 3·6 ozs. in Group IV, and 2·6 ozs. in Group VI. The national average consumption of cheese is 3·2 ozs., or less than half that required for the B.M.A. diet.

It follows that, unless we are to assume drastic changes in the present habits of the people with regard to food, we cannot calculate the increases in consumption necessary to achieve the standard of the B.M.A. minimum diets. Fortunately it is also unnecessary to do so, because, as we have already shown, the *dietetic* requirements of Orr's standard are very similar to those of the B.M.A., the difference in the cost of the two standards being due to the difference in the types of food assumed to provide those requirements and in the prices at which they are assumed to be purchased. It follows that the increase in the quantities of milk, butter, etc., which are necessary to provide our reasonable standard will be equally necessary to provide the minimum. The figures quoted above are, however, interesting as showing the lack of realism in the budgets suggested by the B.M.A. Committee.

(b) *Housing*. The increase in the annual rents that would have to be paid to bring all families up to our minimum standard is approximately £10 million. For the average family of approximately four persons the annual rent on the minimum standard is £26 a year, so that on this basis an increase in total rents of £10 million would correspond to an increase in the number of houses of about 400,000.

On the reasonable standard the increase in total rents is £65 million, which corresponds to an increase in the number of houses of about 1,700,000.

This method of obtaining the number of new houses required can never be more than a rough and ready one, and in actual fact it seriously understates the real requirements. It assumes

in the first place that every family that pays the rent deemed necessary on our minimum standard is in fact adequately housed according to that standard. This, unfortunately, is not so. In certain areas, moreover, owing to the shortage of houses at suitable rents, many families are living in overcrowded conditions although they could *afford* to pay a higher rent if they could find suitable accommodation; yet if their total income is such that they fall in an income group whose *average* expenditure on rent exceeds that necessary on our minimum standard, their housing needs will be excluded by the method of obtaining the number of new houses required from the corresponding increase in rentals. For example, there may be many families whose total income brings them into Orr's Group III, but whose rent per head is less than 2s. 6d. per week and who are living in overcrowded conditions not because they cannot *afford* better accommodation but because they cannot *find* it. Yet the increase in rental necessary to provide these families with houses adequate to their needs is not included in the above calculations. Similarly, in areas such as London where rents are considerably above the average, many families may be paying rents much greater than those required on our minimum standard and still be overcrowded. On the average of the country as a whole these families are offset by other families who obtain adequate accommodation at below our minimum rent, but when we are estimating the number of *new* houses required these families must be allowed for.

In the second place, the method of estimating the number of additional houses required from the increase in total rentals can only be used if all the existing houses can be utilized to provide suitable accommodation on the basis of our standards. Actually, however, large numbers of houses fall so far below our standards that the only thing to do is to pull them down and put up new ones in their place. In other words, besides the number of houses required to deal with overcrowding we have also to provide additional houses to replace those demolished in the process of clearing the slums.

For these reasons, we must try and make direct estimates of the number of new houses required on the basis of the data

given in the Report on the Overcrowding Survey of England and Wales, together with such other information as is available.

The Overcrowding Survey was carried out at the beginning of 1936 and was based on the standards laid down in the 1935 Housing Act. As these standards were considerably more stringent than those we have adopted (cf. page 37 *et seq.*), the actual conclusions of the Survey will not help us, but from the detailed tables given in the Report it is possible to estimate approximately the number of families that were overcrowded on our standards. In round numbers there were 1,100,000 families overcrowded on the basis of our minimum standard, and 3,200,000 on the reasonable standard.

The Report gives an estimate of the number of new houses required to deal with overcrowding on the assumption that the number required "might be as much as 60 per cent" of the number of families found to be overcrowded, but it states that, in fact, the number "is likely to be well under 50 per cent."¹ If we take the latter figure, then the number of new houses required would be about 600,000 and 1,600,000 respectively.

In addition, we have to provide sufficient new houses to enable us to abolish the slums. The term "slum" is a vague and elastic one, and the number of new houses required varies according to the criterion adopted. The Ministry of Health in 1933 adopted a "Five Year Plan" of slum clearance, under which 300,000 slum houses were scheduled for replacement, and in their Report on Housing, P.E.P. estimate that "the replacement of a further 200,000 in the subsequent five years will probably be necessary to abate even the worst of slum conditions,"² which gives a total of 500,000 as a minimum requirement for this purpose.

According to Sir E. D. Simon there are 1,000,000 unfit houses if the standard of the Manchester condemned houses be used, while there are probably some 4,000,000 houses which fall far below modern standards, "all of which must be

¹ *Report on the Overcrowding Survey in England and Wales*, 1936, p. xxiv.

² *Housing England*, by the P.E.P., (Political and Economic Planning) Industries Group, p. 49.

replaced by much better houses before we shall be within sight of our goal.”

If Sir E. D. Simon’s estimates be accepted, we shall be on the conservative side if we take the number of new houses required for slum clearance as 500,000 on our minimum standard, and 1,000,000 on our reasonable standard. We shall then require a total of 1,100,000 houses to deal with both overcrowding and slum clearance on our minimum standard, and 2,600,000 on our reasonable standard.

Such figures are of course only approximate, but in view of the way in which they are derived they probably err on the low side, particularly as no separate allowance has been made for the provision of separate dwellings for families not otherwise overcrowded.

CHAPTER VII

HOW MUCH COULD WE PRODUCE?

(I) *What is Meant by Productive Capacity?*

SO FAR, we have been concerned with discovering how many people are living below our standards, and what sort of increase in income would be required to enable them to reach those standards. We have now to turn to the other side of the picture, that of investigating how far we could have produced the goods and services necessary to enable everyone to achieve our standards, if all our productive resources had been fully employed.

This is in many respects an even more difficult task than the one we have so far attempted, for two reasons. In the first place there are all sorts of difficulties of definition as to precisely what is meant by the term "productive capacity." In the second place there is the difficulty that, although there are plenty of statistics of actual *production*, statistics relating to productive capacity are in most industries conspicuous by their absence. What is really required is an exhaustive and expert survey of each industry made from the point of view of determining how far the goods we desire could be produced if industry were directed to that end; in other words, an economic plan, based on actual investigation of the capacity of each firm to contribute to our objective. Such an investigation could, of course, only be undertaken by government officials equipped with full power to obtain all the information they desire. Short of this, however, very valuable information would be provided by an inquiry as to what increase in output, of the kind of goods they are *currently* producing, could be achieved if all firms were working at full capacity. An inquiry on these lines in the United States has actually been

made,¹ and the authors of the inquiry found that in 1929 productive resources were used on the average to only 81 per cent of capacity. This means that potential output in that year was nearly 25 per cent greater than actual output; and 1929, it will be remembered, was a boom year. In 1932, at the bottom of the slump, actual production was less than 50 per cent of the maximum, so that in that year output could have been doubled, with all the increase in the standard of living of the American people that that implies. Unfortunately, an inquiry on these lines has never been undertaken in this country, and we shall have to be content with such information concerning individual industries as is available, supplemented by statistics of changes in actual output and employment over a series of years. On general grounds, however, it would seem unlikely that unused productive capacity in this country in 1929 (and still more so in 1934), was less than the 19 per cent found in the United States in that year.

Let us consider for a moment the first of the two difficulties we have mentioned, that of definition. What exactly do we mean by "capacity to produce"? Let us take, for example, motor cars. If we devoted all our energies to it we could probably produce enough motor cars to provide all the families in the community with one car each; but in order to do so we should have to forgo the production of quite a lot of other kinds of goods—aeroplanes, trucks, engines, etc.—that we at present produce. Furthermore, even if we decided to do without these things, in order to have our motor cars, we could not produce them straight away. We have not got sufficient factories adapted to the making of cars or sufficient workers who are skilled in the various processes necessary to their manufacture. We should therefore have to set about constructing the necessary factories and machinery, and training the necessary workers, all of which takes time. Given sufficient time, we could probably increase the output of any particular commodity, such as motor cars, to any desired extent, but only provided that we were willing to sacrifice the production of other commodities at present considered desirable. This

¹ *America's Capacity to Produce*, published by the Brookings Institution.

example shows us that there are at least two questions to be settled—the relative quantities to be produced, and the time to be allowed for their production. The first arises from the fact that with a given total of productive resources—land, labour, raw materials, etc.—we can produce varying quantities of different kinds of goods; more cars and less houses, or more guns and less butter. The second arises from the fact that some of our existing productive resources are specialized in the production of certain kinds of goods, and they can only be adapted to the making of other goods after a considerable period of time. Some resources, indeed, are so highly specialized that they cannot be transferred at all, and if the commodities for which they are specialized are not required they will have to be scrapped altogether.

Even when we have settled these two questions, however, we have not exhausted our difficulties. We can not only vary the kinds and quantities of the goods we want to produce, but we can vary the way in which any particular commodity is actually made. Shoes, for example, can be made either by hand or by machine, or the parts may be made by machine and then be hand sewn to complete the finished article. The number of ways in which machinery, raw materials, and labour can be combined to produce any given finished article are in fact almost infinite. Many goods are at present manufactured in factories and by processes which are very inefficient as compared with the most up-to-date methods now available, while the introduction of these methods would involve considerable changes in the relative proportion of labour and capital employed. When we are estimating what volume of goods we could produce, are we to assume that they are manufactured with the existing plant and equipment by the methods at present employed: or do we mean the volume of goods that could be produced if we modernized all our equipment and used only the most up-to-date methods? This question is in fact linked up with one we have already mentioned, that of the period of time we have in mind: for the modernization of equipment and the transfer and training of workers to use the new methods cannot be accomplished in a day.

There is one other problem in this connection that ought to be mentioned: a problem of opposite character to the one just considered. It is possible, by driving the available machinery to the utmost and not worrying about replacements or repairs, to increase the *immediate* output of goods very considerably at the expense of a considerable fall later on. We could, for example, concentrate on producing as many consumable goods as possible for a short while and leave the question of repairs and replacing obsolete and worn-out machinery to a later date. Our production would thus be greatly increased for a while but the increase could not be maintained, and we should, literally, be living on our capital. This actually occurred, to some extent, during the war, except that the goods produced were not consumers' goods but munitions. Repairs to railroads, houses, and so on, were reduced to a minimum so as to concentrate all efforts on the production of things essential to the carrying on of the war. Clearly, in estimating potential productivity, we must have in mind a rate of production that can be maintained indefinitely, which means that we must allow for adequate repairs and replacements before calculating our net output.

Finally, we have to consider the hours of work and the conditions under which the work is to be done. By lengthening the hours of work, speeding up the pace of mass production processes, and relaxing the restrictions and regulations regarding working conditions, it would be possible to secure a considerable increase in output at the expense of the health and happiness of the worker. Such a process would be analogous to that of not maintaining our equipment—we should be living on our human capital. Moreover, it would defeat the whole purpose of the desired increase in output, that of raising the standard of living, and hence the health and happiness, of the great mass of our people. We must therefore assume that hours and conditions of work are at least not worsened, and are preferably improved.

It will be realized by now that the idea involved in the term "productive capacity" is by no means as simple as would appear at first sight. Theoretically, we ought to state (1) what kinds and quantities of goods and services we want produced;

(2) in what period of time they are to be produced; (3) the methods by which they are to be produced; and (4) the hours and conditions of work under which they are to be produced. As has already been pointed out, this would involve comprehensive economic planning in which detailed account is taken of the whole of our productive resources, these being so dovetailed together as to produce the maximum of the kind of goods we desire. In such a plan account would have to be taken not only of home production but of foreign trade as well. We should have to make up our minds which goods it is better to make at home, and which goods it is better to import. In the latter case we should also have to decide what goods we were going to export in order to pay for them.

Such a comprehensive plan, however, is obviously outside the scope of our present inquiry, if only for the reason that the necessary data are not available. We shall have perforce to limit ourselves to the more limited objective pursued by the authors of the American inquiry to which reference has already been made; namely, that of discovering what increase in output would be possible if each plant and factory were used to the full in producing the kind of goods it is at present engaged in producing, by the methods and with the equipment at present used. In the case of a few of the more important industries it will be possible to supplement this with some illustrations of what could be achieved, given the necessary time, by the introduction of the most modern machinery and processes. These, however, will be given simply as illustrations, the main emphasis being laid on the immediate increase in output that would be possible by the fuller utilization of the existing resources, both human and material. We can then compare the increases in output that would be possible on these assumptions with the increases necessary to enable the whole population to live on our minimum and reasonable standards. The results will show, not how far our standards could be attained if we deliberately organized our productive resources to that end, but how far they could be attained with the existing industrial structure.

(2) *The Evidence of the Indexes of Production*

As soon as we try to translate this plan into action, however, we come up against the fact that except for a few special industries statistics of productive capacity do not exist. The only figures that are available are those relating to actual output and to employment and unemployment. Even output figures are not available for all industries except for certain specified years. The figures for the Censuses of Production, which give a comprehensive picture of output for all industries, are available only for three post-war years, 1924, 1930 and 1935. Similar figures are available for certain industries for 1933 and 1934 as a result of the inquiries made under the Import Duties Act, but some industries which are very important from the consumer's point of view, in particular tailoring, dress-making, millinery, etc., were not included. For a few industries, such as coal, iron and steel, monthly figures are published.

Fortunately, however, the Board of Trade publishes quarterly index numbers of the physical volume of production in different industries, together with a composite number for industry as a whole. These figures, it is true, do not show us the actual amounts produced, but they do enable us to calculate the percentage changes in output from year to year, which for our purpose is just as useful. Between 1932 and 1937 British industry was passing through a period of trade recovery—what, in more stable times, would have been called the upward phase of the trade cycle—which reached its peak round about the summer of 1937. Thus 1934 represents roughly the half-way house in the upward movement, so that we can take the amount of unused productive capacity available in that year as representing also the *average* amount unused throughout the whole trade cycle. 1934, in other words, was neither a boom year nor a slump year, but one which can be regarded as more or less normal. Furthermore, the interval between 1934 and 1937 is sufficiently short to enable us to take the increase in output between those two years as broadly indicative of the potential unused capacity existing in 1934: not, it is true, using

quite the same methods as were used in that year, but with such improvements as could be quickly introduced. In fact, since the number of unemployed in 1934 was greater than the number absorbed into employment between 1934 and 1937, and since, even in the latter year, industry was not producing to full capacity, it is reasonable to assume that the potential increase in output in 1934 was considerably greater than the increase actually achieved by 1937.

The Board of Trade index shows that the physical volume of production increased by 25 per cent between 1934 and 1937, while the corresponding figure for the second quarter only of 1937 was 26 per cent. It is interesting to note that the increase in employment between these two years was about 13 per cent, or only half the increase in production.

It will be remembered that the increase in consumption necessary to achieve our reasonable standard was 20 per cent while for our minimum we needed an increase of only 4 per cent. On the surface, therefore, it would appear that by the second quarter of 1937, when there were still 10 per cent of insured workers unemployed, we had exceeded the 20 per cent increase necessary for the reasonable standard. Such a conclusion, however, would be unjustified without further investigation, for three reasons. In the first place, the increase in output was not evenly spread over the different industries. Engineering and shipbuilding, for example, showed an increase of 45 per cent, while mines and quarries showed one of only 10 per cent. Secondly, the increase necessary for our standards is not uniform for all industries; for our reasonable standard a 40 per cent increase in expenditure on clothing is necessary, as compared with 17 per cent on fuel and light. Finally, the index of production does not even cover the whole of industry, while transport and various other services which are included in our miscellaneous items are omitted altogether. It is clear that a more detailed analysis is necessary.

Let us begin by examining the increases in the individual groups included in the Board of Trade's index. These are shown in Table XIII, both for the whole of 1937 and for the highest individual quarter in the period 1935 to 1937.

TABLE XIII

Percentage Increase in Output as compared with 1934

<i>Group</i>	<i>Whole of 1937</i>	<i>Highest Individual Quarter in the period 1935-7</i>
1. Mines and Quarries ...	10	14 (4th Quarter, 1937)
2. Iron and Steel ...	44	53 (4th Quarter, 1937)
3. Non-Ferrous Metals ...	35	42 (3rd Quarter, 1937)
4. Engineering and Shipbuilding	44	46 (2nd Quarter, 1937)
5. Building Material & Building	18*	23 (3rd Quarter, 1936)
6. Textiles ...	14	19 (2nd Quarter, 1937)
7. Chemicals, Oils, etc. ...	18	19 (2nd Quarter, 1937)
8. Leather, Boots and Shoes...	12*	17 (1st Quarter, 1936)
9. Food, Drink and Tobacco	17	22 (2nd Quarter, 1937)
10. Gas and Electricity ...	32	56 (4th Quarter, 1937)

* These figures are for 1936, as for these groups the index was higher in 1936 than in 1937.

N.B.—The figures in the final column were obtained by dividing the index number for the appropriate quarter by the index number for the complete year 1934. They thus represent the percentage increase in the rate of production as compared with 1934.

It is clear that the average increase of 4 per cent necessary for our minimum was greatly exceeded in all the industries included in the table, but the 20 per cent average increase necessary for the reasonable standard was exceeded in 1937 in only four out of the ten groups. In two of the remaining groups, building and food, drink and tobacco, the 20 per cent was exceeded in one quarter, while two other groups, textiles and mines and quarries, were well known to be still working at well under full capacity.

When we come to compare the increases in the individual industries with those required in the separate items of expenditure (see Table XI), we are faced with the difficulty that only two of the items directly correspond to the industries included in the table. For example, the "food, drink and tobacco" group only covers the manufacturing processes, so that the great bulk of the foodstuffs actually consumed are not included,

while the absence of the tailoring and hosiery trades from the Board of Trade index means that clothing is only partially covered. On the other hand our "miscellaneous" item includes expenditure on various services, such as social insurance, which fall entirely outside the scope of production proper.

(3) *Fuel and Light*

This leaves us with expenditure on fuel and light and housing accommodation. We need an increase of only 1 per cent in the expenditure on fuel and light to reach the minimum standard: while a 17 per cent increase is needed for the reasonable standard.

There was an increase of 32 per cent in the production of gas and electricity between 1934 and 1937, but in this case a considerable development of productive capacity, particularly in the case of electricity, took place between these two years so that we cannot say that there was a surplus of this amount actually available in 1934. (Of course, since only part of the total output of gas and electricity is used for domestic consumption the increases necessary to attain our standards, expressed as percentages of the *total* outputs, will be considerably less than the 1 per cent and 17 per cent just given; but as against this we have to set the fact that the amount used for industrial purposes will have to be increased also if our standards are to be achieved.)

It is probable, however, that any immediate increase in the money available for fuel and light would be mainly spent on coal. When money is short it is easier to economize on heating than on lighting, and coal is still the main source of warmth in working-class houses. Fortunately (or, perhaps, unfortunately) there is no doubt at all as to our capacity to produce coal in far greater quantities than we are at present producing. If we assume the whole of the increased expenditure on fuel and light to be spent on coal, this would necessitate an increased output of roughly $\frac{3}{4}$ million tons to provide for the minimum, and $12\frac{1}{2}$ million tons for the reasonable, standard. In 1934, 221 million tons of coal were produced, so that the percentage increases

required are under $\frac{1}{2}$ per cent and 6 per cent respectively. In the same year 28 per cent of the miners were unemployed, while many of those employed were working short time.

The home consumption of coal in 1934, apart from that used for household purposes, was approximately 130 million tons. If we assume that the 20 per cent increase in expenditure necessary to achieve our reasonable standard would necessitate a proportionate increase in the industrial consumption of coal, the additional output required would be 26 million tons. The actual increase would in all probability be less than this, because of the economies that are continually being effected in the industrial use of coal. This, together with the additional output of $12\frac{1}{2}$ million tons which we have estimated as the maximum that would be required for household uses, gives us a total of say 40 million tons as the *maximum* increase that the coal industry would be called on to supply, making the total output required 260 millions. In 1913 the *actual* output was 287 millions, and even in 1929, when 16 per cent of the workers in the industry were unemployed, 258 million tons were produced. Between 1929 and 1934 the percentage of coal cut by machine increased from 28 per cent to 47 per cent, while the percentage of coal that was mechanically conveyed after cutting increased from 14 per cent to 35 per cent, so that there can be no doubt that the industry could have produced considerably more than 260 million tons in 1934, with fewer workers than were employed in 1929, if the demand had been forthcoming. It is indeed a tragic commentary on our present economic system that many people should lack the coal to keep warm while our mining villages are desolated for want of employment.

(4) *Possible Improvements in the Coal Industry*

When we come to consider the potential increase in output that could be obtained by the introduction of more efficient methods, it is clear from the figures already quoted that mechanization has still a long way to go. On this point the following passage from the Report on the British Coal Industry published by P.E.P. is very instructive:

The advantages of the use of machine-cutters in thin-seam pits such as prevail in Scotland and Northumberland have long been appreciated, and the possible limits of mechanization in such districts are being nearly reached. It is only of recent years, however, that mechanization has been at all widely introduced in districts where the seams are thicker and easily worked by hand. Mechanization in Great Britain has taken place mainly by the introduction of machine-cutters, in contrast to practice on the Continent where the use of pneumatic picks is practically standard. Mechanization on this latter system requires to be very seriously considered in this country as the most efficient method in thick seams and in South Wales. The number of picks and drills used trebled between 1929 and 1934, but it is still small in relation to the total output of coal.¹

Before the war, according to the same Report, British output per man-shift was exceeded only by Polish Upper Silesia, but is now "substantially lower than that of the Ruhr, Polish Upper Silesia and Holland. This is mainly due to the much greater progress of mechanization on the Continent."²

The plight of the coal-mining areas is so well known that it is hardly necessary to state that increased production is scarcely likely to be impeded by any shortage of labour. The Report just quoted points out that employment in the industry fell from 970,000 in 1929 to 785,000 by the end of 1934, at which date there were over 220,000 recorded as wholly or temporarily unemployed. It goes on to say that:

Even with a recovery to the 1929 level of output, there would not be a recovery to the 1929 level of employment. The progress of mechanization since that year has very much reduced the labour force necessary to produce a ton of coal. . . . For this reason, and because the industry could produce a very much larger output than at present without taking on new men, by working up to full time, it is doubtful whether many of the 168,000 men who were displaced between 1929 and the end of 1934 would be reabsorbed by a return to the 1929 level of output.³

¹ *Report on the British Coal Industry*; published by the P.E.P. (Political and Economic Planning) Industries Group, p. 2.

² *Op. cit.*, p. 11.

³ *Ibid.*, p. 23.

In fact, one of the difficulties that the authors of the Report are up against is that further mechanization is bound to aggravate unemployment among the miners, because they cannot foresee any increase in production sufficient to offset the displacement of labour it will cause. Our concern, however, is with the extent to which we could increase output with the existing labour force, rather than with the problems produced by maintaining output with a diminished labour force; and it is clear from what has been said above that the potential increase in output consequent on the maximum utilization of modern methods must be very large.

Nor is it only in the field of production that improvements in efficiency could be effected; both in the distribution and the transport of coal there is at present much waste and inefficiency. The P.E.P. Report estimates that there are at least 27,000 separate retail outlets through which coal is sold and that there are very many dealers who do not handle more than one truck-load of coal per week.

The standard of service to the consumer is extremely low and the average cost of distribution extremely high. . . . It is undeniable that an excessive charge per ton has to be made in order to support an excessive number of persons engaged in the industry, and that many small merchants make a living out of small turnovers which would not provide a living if the distributive margin were not excessive.¹

The Report goes on to say that "Under the present system there is little prospect of securing any reduction in the high cost of distribution," and it concludes that "the concentration of the distributive trade in fewer hands, and a corresponding increase in the average turnover would prove very easily capable of reducing the cost of distribution by as much as 4s. per ton."²

A similar situation of a large number of small and inefficient units is found in the transport of coal. On this point the P.E.P. Report remarks that:

¹ Op. cit., pp. 15-16.

² Ibid., pp. 15-16.

Both the export and the inland trade would benefit from a re-organization of the coal transport system which at present shows serious inefficiency at several points. There are according to the latest available figures (which are not recent) more than 4,000 wagon owners and 754,000 wagons of very many different types of construction, many of them more than thirty years old (thirty years is the average efficient life of a wagon), 80 per cent of them being of 8 to 12 tons carrying capacity only.¹

The Report points out that the general introduction of the twenty-ton wagon, which was recommended both by the Samuel Commission and in the first report of the Standing Committee on Mineral Transport, would permit of considerable economies in running, in shunting and in siding accommodation. It would, however, necessitate considerable alterations in terminal facilities, the cost of which is estimated at nearly £9 millions.

Private ownership and the excessive number of wagons (though this must not be reduced too much as the wagon provides the only economical method of storing coal), obviously greatly complicate the business of shunting and sorting empties and the organization of repairs, besides tending to lead to an endless variety of types. The railways have made efforts to encourage the use of common-user wagons in consequence.²

The Report concludes that:

The economies to be achieved should not, however, be exaggerated. The universal introduction of twenty-ton wagons would probably permit a reduction of 10 per cent in existing [railway] rates, with possibly another 10 per cent if the common-user system were introduced. But 20 per cent off existing rates means a reduction of 2s. per ton in the cost of distributing coal to the London market. This would only be obtainable under ideal conditions.³

Finally, mention must be made of the wastage and inefficiency caused by the private ownership of royalties. In the words of the Report of the Samuel Commission:

A system which vests the ownership of minerals under the surface in the owner of the surface means that the planning of the mines is influenced continually by surface boundaries and surface rights.

¹ *Op. cit.*, p. 17.

² *Ibid.*, p. 18.

³ *Ibid.*, pp. 18-19.

But surface boundaries have no relevance at all, and surface rights only a minor relevance to the proper organization of the industry underground. . . .

It is found that, on the average, each mine has had to obtain leases from no fewer than five mineral owners. Nevertheless, the areas of coal worked from any particular pit have not necessarily been those areas which could most economically have been worked from that pit, but those for which the mine-owner has succeeded in obtaining leases. The consequences have been an undue expense in development and a waste of time for the miners in travelling underground to and from their work. These defects of the past are continuing in the present, and will prejudice the future. . . . A variety of minor points, dealing with the barriers of coal left between properties, systems of drainage, rights of support of the surface, wayleaves and other matters, may also be instanced.¹

It may be added that at long last, as a result of the Coal Mines Act passed in July 1938, coal royalties are to be nationalized and vested in a Coal Commission in 1942, seventeen years after the above Report was published!

(5) *Housing*

Building materials and building showed an 18 per cent increase between 1934 and 1936, which compares with an increase in expenditure on housing of 17 per cent if everyone is to achieve our reasonable standard. Such a comparison, however, as has already been pointed out, does not get us very far and it will be more useful to examine the figures of the number of new houses that have been built. Table XIV shows the number of houses built in England and Wales.

TABLE XIV

Number of Houses built in the year ending September 30th

Year	No. of Houses (to nearest thousand)
1933 ...	... 218,000
1934 ...	... 314,000
1935 ...	... 319,000
1936 ...	... 340,000
1937 ...	... 337,000

¹ *Report of the Royal Commission on the Coal Industry (1925)*, pp. 77-8.

It is clear that by 1934 the building boom with which we have been familiar in recent years was well under way. Between 1933 and 1934 the number of houses built increased by nearly 50 per cent, while between 1934 and 1936 (which was a record year) there was a further increase of between 8 and 9 per cent. Even in 1936, however, on the average 15 per cent of persons engaged in the building trades were unemployed.

The number of houses required to meet obsolescence may be put at 30,000 per annum, while the number required to meet the natural growth in the number of families over the next few years has been estimated at between 50,000 and 75,000 per annum.¹ If we take 363,000² as the maximum number of houses we can build in a year (an extremely conservative assumption), this will leave us with, say, 270,000 houses each year to deal with overcrowding and slum clearance. It will be remembered that the number of new houses required on our minimum and reasonable standards (apart from those necessary to provide for the expansion in population) for England and Wales is 1,100,000 and 2,600,000 respectively. On this basis it would take just over four years to reach the minimum, and just under ten years to reach the reasonable standard.

(6) *Clothing*

We have seen that the item for which the biggest increases are required is clothing: but here, unfortunately, we are unable to use the Board of Trade figures because, except for boots and shoes, the clothing industries are excluded from its index.

Some light is thrown on the unused productive capacity available by the figures of unemployment in the different industries. Considerable care must be exercised in drawing any conclusions from these figures. On the one hand the figures already quoted show that the increase in production between 1934 and 1937 considerably outstripped the increase in employ-

• ¹ Sir E. D. Simon puts the number for the decade 1932-41 at 750,000; while the authors of *Britain Without Capitalists* put it at 50,000 per annum. (The figures refer to England and Wales.)

² This is twice the number actually built in the half-year ending March 31st, 1937.

ment. On the other hand, full employment at any particular moment is most improbable even under the most favourable conditions, if only for the reason that there will always be some people out of work temporarily while they are changing their jobs. A more important qualification is that as production increases "bottlenecks" will appear. Shortages of particular types of skilled labour will occur which will hold up the employment of other kinds of skilled labour or, more probably, of unskilled labour, until the shortage is remedied. This is particularly likely to occur in occupations in which there has been prolonged unemployment and in consequence the training of apprentices has been allowed to fall off. This indeed is one of the worst consequences of prolonged under-production, that the premium on skilled work disappears, and it is no longer worth the employer's while to maintain the skill of his workers, or the young worker's while to acquire skill. There thus grows up a vast number of young people who have never had the opportunity of acquiring a skilled training, while older persons gradually lose the skill they previously possessed through disuse. Thus if and when a revival in trade does set in, "bottlenecks" in which production is held up are likely to occur through the shortage of the necessary skilled workers.

A further and more important reason for the appearance of these bottlenecks in a period of expanding trade activity is that the expansion does not take place at the same rate or at the same time in all industries, with the result that one industry or section of industry may be working to full capacity while others are still producing at far below their full capacity. (The Special Areas afford a very striking example of this.) This may be very important when we are considering production and employment as a whole, but it is not likely to be so important when we are considering individual industries.

With these qualifications in mind, let us examine the unemployment percentages in the clothing trades. These are set out in Table XV.

It is clear from this table there were considerable unemployed reserves of labour in all the clothing industries in 1934. In addition there was a good deal of short-time worked, which, of

TABLE XV

Percentage Unemployed in the Clothing Trades in 1934

Tailoring	13
Dressmaking and Millinery ...	6
Hats, Caps, etc.	12
Shirts, Collars, Underclothing ...	10
Hosiery	11
Other Dress Industries	7
Boots and Shoes	18

course, does not appear in the above figures. Its extent, however, can be gauged from the results of an inquiry made by the Ministry of Labour in October 1935 into the amount of short-time working in various industries. The results so far as the clothing and textile trades are concerned are shown in the following table:

TABLE XVI

Short Time Working in the Clothing and Textile Trades in October 1935

	<i>Proportion of all Employed Work- ing Short Time</i>	<i>Average Number of Hours lost during week by those Working Short Time</i>
Tailoring	37	9.3
Wholesale Mantle and Costume	21	9.7
Dresses, Blouses and Overalls ...	28	9.8
Shirts, Collars and Underclothing	31	7.3
Clothing Manufacture	18	9.6
Felt Hat Manufacture ...	14	12.9
Boot and Shoe Manufacture ...	19	7.9
Laundries	45	6.1
<i>Total Clothing*</i>	28	8.4
Cotton	8	13.4
Woollen and Worsted	10	10.6
<i>Total Textiles*</i>	12	11.1

* Including industries not separately specified.

(7) *The Textile Trades*

Let us now push our inquiry a stage further and see how the position stands with regard to the group of industries which

supply the clothing trades with their materials, namely, the textile trades. It is well known that the textile trades have depended mainly on exports for their prosperity and that they have been one of the worst sufferers from under-production and unemployment since the short-lived hectic boom at the close of the war. Furthermore, they only participated to a comparatively minor extent in the trade recovery of 1932-7.

Since a considerable part of the textile trade produces for export, the percentage increase in total output required for our reasonable standard will be much smaller than 40 per cent. If we assume that the increased expenditure is evenly spread over the whole range of articles of clothing, then we shall require an increase of 40 per cent in the output of textiles produced for home consumption. Since, however, in 1934 three-fifths of cotton textiles and one-quarter of wool textiles were exported the required increase in *total* production is only 16 per cent in the case of cotton and 30 per cent in that of wool.

That the cotton industry could achieve an increase of far more than 16 per cent in its output without the slightest difficulty is clear from the fact that in 1934 nearly one-quarter of the cotton workers were unemployed, but the really appalling degree of under-production which has existed since the war is even more strikingly shown by the figures of production.

The cotton industry is composed of three main sections, the spinning section, which spins the raw cotton into yarn; the weaving section, which weaves the yarn into cloth; and the finishing section, where the cloth is bleached, finished, dyed or printed. For the spinning and weaving sections, figures are available for certain years, both for the actual output and for the amount of plant. In the spinning section, the output of yarn, which before the war had reached 2,000 million pounds, had fallen by 1924 to 1,400 million pounds, and by 1934 to 1,200 million pounds. In the weaving section, the production of piece goods fell from 8,000 million yards before the war to 6,000 million square yards in 1924, and to 3,500 million square yards in 1934. Thus, in 1934 output was only three-fifths of pre-war in the spinning section, and two-fifths in the weaving section. In 1938, the output of cotton cloth, according to an

estimate quoted in the *Statist*,¹ fell to 2,700 million square yards, while the production varied between 50 per cent and 60 per cent of full capacity. Thus in 1938 potential production was about 4,500 million square yards, or nearly 30 per cent more than the actual output in 1934.

The same story is told by the figures of the number of spindles available in the spinning section and the number of looms in the weaving section. There are two types of spindle employed in the spinning section, the mule spindle and the ring spindle. The latter is the more modern and is reckoned as equivalent to one and a half mule spindles. On this basis, the number of "mule-equivalent" spindles in place was 63 million in both 1924 and 1930. Since 1930, as the result of a policy of deliberately destroying idle spindles, the number fell to around 52 million in 1934, and, still further, to 41 million in 1938. The Colwyn Committee estimated that early in 1934 there were 13½ million surplus spindles, or about one-quarter of the total number available.

It is worth noting that since 1936 the destruction of excess spindles has been organized directly under Government auspices through the Spindles Board, set up for the purpose under the Cotton Spinning Industry Act of that year.

The same policy of destroying surplus plant has been pursued in the weaving section. As a result, the number of looms in place fell from 790,000 in 1924 to 650,000 in 1930 and 530,000 in 1935. Even this drastic destruction, however, was insufficient to eliminate the surplus capacity, for in 1935, according to an estimate quoted in the *Economist*, "of the 500,000 looms in Lancashire, fully 150,000 can be considered redundant. The prospective capacity of the industry might be as low as 300,000 looms, which compares with the 800,000 in existence in 1914."²

It would appear from the figures just quoted that in 1934 the cotton industry could have produced at least 50 per cent more cloth than it actually did produce, which would cover the increase necessary for our reasonable standard nearly four times over.

¹ The *Statist* (Banking and Commercial Review), February 25th, 1939.

² The *Economist*, September 28th, 1935.

An indication of the surplus productive capacity available in the finishing trades was provided by the chairman of the Bradford Dyers' Association at the annual general meeting held in February 1937, who stated that:

The heavy fall in the volume of cotton piece-goods to be dyed has resulted in the industry working only to about 60 per cent of its capacity, with the concomitants of uneconomical operation and ruthless price competition.

He went on to say that:

Our committee, realizing fully that the industry could not be resuscitated so long as the excess of dyeing plants continued in commission, have directed their efforts towards obtaining the approval of a majority of the trade to the adoption of proposals for the purchase and closing down of redundant plant so as to place the remainder of the industry on an efficient basis. . . . The cost is to be borne equitably by the whole of the remaining concerns engaged in the trade, and in this we are dependent upon Government aid in requiring that everyone carrying on the industry should contribute to the necessary levy.

He concluded by saying that he hoped the Government would support the scheme by endowing it with the necessary statutory authority.¹

It is indeed an ironic commentary on the present state of affairs that clothing should be the item for which present consumption falls farthest below our reasonable standard, while at the same time the cotton industry, which provides a large part of the material of the clothing trades, should be the industry with the maximum surplus capacity and the one in which the systematic destruction of existing plant and machinery, with Government support, is being most rigorously pursued.

From the longer term point of view there is a wealth of evidence to show that efficiency could be greatly improved and output correspondingly increased. We have already referred to the difference between the mule and the ring spindle, the latter being considered by the Spindles Board as equivalent to

¹ Reported in the *Times*, February 27th, 1937.

one and a half of the former. Yet, according to the P.E.P. Report on the Cotton Industry:

About 76 per cent of the total spindles in the U.K. are mule spindles, whereas in other countries ring spindles, which have a higher output, represent on the average about 66 per cent of the total.¹

Mr. J. Ryan, in an article in the *Economic Journal*, wrote as follows:

The three main machinery developments in the Cotton Trade have been:

- (a) Ring Spinning.
- (b) Automatic Looms.
- (c) High-speed Winding.

These factors are all stressed in the recent report of the Government Inquiry into the Cotton Trade, as necessary if Lancashire is to recapture her lost trade. It seems important, therefore, to determine if possible the rate at which these developments are taking place in Lancashire.²

As a result of his investigations Mr. Ryan concluded that:

No important increase is taking place in Ring Spindles, nor are Ring Spindles replacing Mules to any appreciable extent. The conclusion must be that progress in this respect is almost negligible.³

In regard to automatic looms he concluded that:

There are, however, as far as I can ascertain, less than 20,000 automatic looms and attachments in Lancashire district, or under 3 per cent of the trade. . . . There is no indication that the rate of introduction of automatics is increasing in Lancashire, though the figures for all other Cotton Weaving countries all show important and constant increases.⁴

His conclusion with regard to High-speed Winding is that:

¹ *P.E.P. Report on the British Cotton Industry*, 1934, p. 53.

² "Machinery Replacement in the Cotton Trade," by J. Ryan, *Economic Journal*, December 1930, p. 577.

³ *Ibid.*, p. 578. Of recent years there has been some replacement, but only as a result of the greater destruction of mule spindles. The absolute number of ring spindles has declined from a peak figure in 1927 of 13½ million to 10½ million in September 1938.

⁴ *Ibid.*, pp. 578-79.

With some reserve [owing to the scanty data] I believe that the number of High-speed Winding Spindles in Lancashire Mills is to-day about 10,000 to 12,000, or $\frac{1}{3}$ to $\frac{1}{2}$ per cent.¹

Mr. Ryan also made an investigation into the age of the machinery employed in two hundred mills, covering between them over one-third of all the spinning-mills and one-fourteenth of the weaving-sheds. The P.E.P. Report already quoted summarizes his results for the spinning-mills as follows:

It is estimated that opening machines, carding engines and draw frames have an efficient working life of thirty years. It was concluded as a result of this survey that 21.3 per cent, 31.3 per cent and 35.1 per cent respectively of these machines had outlived their efficient working life. About 93 per cent of the combers had run for less than twenty years while 40.4 per cent of the speed frames had run for more than thirty years. It was found that some mules which were installed forty years ago were working satisfactorily, so that about 20 per cent could definitely be regarded as inefficient [i.e. 20 per cent were installed more than forty years ago], while as rings have a working life of thirty-five to forty years, it will be seen that about 95 per cent are of reasonable efficiency.²

It should be added that combers were installed in only 10 per cent of the mills examined.

In the weaving section Mr. Ryan does not give any figure for the efficient life of a loom, but his investigation showed that 42 per cent of the looms were more than thirty years old, and 27 per cent were more than forty years old.

One does not have to be an expert in the various manufacturing processes that go to make up the cotton industry to realize the force of the summing up of the position in the P.E.P. Report that "There is little information available about the efficiency of the equipment in Lancashire, except that a substantial proportion of it is obsolete."³

The same Report gives figures illustrating the reduction in labour that would be effected by the introduction of four main improvements on the existing machinery. Although mainly expressed in the form of a reduction in the number of workers

¹ *Economic Journal*, pp. 579-80. ² *P.E.P. Report*, p. 54. ³ *Ibid.*, p. 93.

employed for a given output, the figures also indicate, what is important from our present point of view, the increase in output that could be obtained with the *same* number of workers by the introduction of the new methods.

The first improvement is the replacement of mule by ring spindles which has already been referred to. On this the Report comments that:

The ring frame can be operated entirely by female labour. Moreover, the ring frame occupies a much smaller floor space, requires less motive power, and produces one-third more yarn than a similar number of mule spindles.¹

The Report then considers the question of high-draft spinning.

The second technical improvement of importance is that of high-draft spinning. In this country, the number of mills which have adopted this system is negligible, while in other countries it has been adopted on a large scale. Low drafting—the system almost universally used in this country—is more costly, for it involves the triplicating of charges in the card room. Moreover, the charges for depreciation, interest and floor space, are considerably higher than under the high-drafting system.

The chief reason for Lancashire not adopting high-drafting is that it is more suited to ring spinning than to mule spinning. . . .²

The Report compares the labour requirements of a mill before and after changing from mule spinning to high-draft spinning. Under the old system 300 workers were required, of which 180 were male and 120 female. Under the new system 240 were required, of which only 34 were male and 206 female. On the assumption that the total output was the same in the two cases, this would mean that the output per worker employed was increased by a quarter.

The third improvement is the introduction of automatic looms, of which the Report says that “Up to the present, relatively few automatic looms have been introduced in Lancashire, and it is estimated that only about sixty sheds have automatics and about thirty sheds automatic attachments.”³ (The latter

¹ *P.E.P. Report*, p. 94–5.

² *Ibid.*, p. 95.

³ *Ibid.*, p. 83.

is an attachment to the ordinary loom making it semi-automatic.) The Report then gives a table comparing in detail the labour required for weaving sheds working the four-loom (non-automatic) system and the automatic looms system. The net effect is that the number of workers per shed is reduced from 318 to 114. Put the other way round, this means that the output per worker employed is nearly trebled. The importance of the introduction of automatic looms lies in the fact that it makes possible an increase in the number of looms per weaver without speed-up or sweating.

The fourth technical improvement is the introduction of high-speed winding and beaming. We have already quoted Mr. Ryan's estimate that in 1930 the number of high-speed winding spindles was only one-third per cent to one-half per cent of the total, and this is confirmed by the P.E.P. Report which says that:

Until recently little attention has been paid to winding and beaming, but technical research has shown that the older methods have detrimental effects upon the quality of the yarn. The new methods . . . have been widely adopted in other countries. . . . In this country winding and beaming are still done according to the old methods, but should any of the new methods be introduced, labour displacement would result, particularly with the Barber-Colman system.¹

It then proceeds to compare the amount of labour required in a typical mill with a standard weekly output for five different systems of preparation. For our purpose it will suffice to compare the present Lancashire system (the slow speed system), with the most modern of the high speed systems (the Barber-Colman system). The comparison shows that the number of workers would be reduced from 56 to 14, in other words, the output per worker would be increased four times!

The above examples serve to make clear even to the layman, bewildered as he may well be by the technical intricacies of the industry, that the adoption of these technical improvements could produce a very substantial increase in output—at least a

¹ *P.E.P. Report*, p. 81.

third and possibly many times that amount—on top of the increase that would be obtained simply by re-employing the existing idle plant and labour.

Nor would there be any difficulty in producing the new machines that would be required, for the textile machinery industry has been almost as depressed as the cotton industry itself. In the words of the P.E.P. Report:

Technical modernization of plant hangs on new finance. The will is there, the plant makers and technicians are there. When the industry is placed on a profitable basis re-equipment will quickly follow.¹

There is thus, in the view of the authors of this Report, no *technical* difficulty in re-equipping the industry; the only difficulty is that it is not profitable to do so. This, however, raises issues which must be left for a later chapter.

Finally, mention must be made of the increased efficiency that could be obtained by concentration and standardization, and here again we cannot do better than quote the words of the P.E.P. Report:

The fundamental characteristics of the weaving section are the great variety of its products and the smallness of its mills. . . . It has been shown by Dr. Wisselink that the number of looms engaged on the production of one particular kind of cloth in the chief weaving towns is very small. . . . This small number of looms per mill and per product is inadequate to secure the most economical use of plant. For Burnley products Dr. Wisselink estimates that the most economical size of a mill is one of 2,500 to 3,000 looms, while the minimum should never be less than one of 1,800 to 2,000 looms, and at this size only a few types of cloth should be produced. In America mills catering for the same trade generally devote 500 to 1,000 looms to the production of one type of cloth.²

With these figures may be compared the actual figures for Burnley, which show that the average number of looms per mill is only 860, while the average number of looms per product is as low as 65³. The Report concludes that:

If production in Lancashire could be standardized there would be

¹ *P.E.P. Report*, p. 18.

² *Ibid.*, p. 64.

³ *Ibid.*, p. 64.

an immediate economy in costs of production.¹ . . . The United Kingdom is probably the only country which has not got standard cloths.²

And again later on in the Report:

It has been repeatedly emphasized that the large variety of cloths produced has prevented economic production. Therefore, the first aim in the reorganization of the weaving section should be the concentration of production on long runs of standardized lines, while retaining diversification for specialities.³

The objection may perhaps be raised that our examination of the surplus capacity available in the cotton industry has assumed that all the idle spindles and looms could be used to produce fabrics suitable for consumption in this country, whereas a considerable part of the fall in Lancashire's production has been in low quality goods for export to India and China. It is perfectly true that it is the American section of the industry (which spins the coarser counts) which has been hardest hit by Japanese and other competition, but it does not follow that this section could not gradually turn to the production of the finer counts. Indeed, one of the complaints of recent years has been of the intensified competition due to the encroachment of the coarse on the fine section, and the first two of the P.E.P. Report's three basic points for a planned production policy are directed to dealing with this. They are:

1. A re-separation into the fine and American sections and an end to the uncontrolled encroachment of mills spinning coarser counts and sheds weaving coarser cloths into the fine section.

2. As an essential counterpart to this, a powerful stimulus to the production of fine and speciality goods, rayon mixtures and new styles of fabrics, in order to offset at least part of the inevitable decline in the low quality goods. This basic point of policy must be linked up with an intensive research programme on new fabrics, finishes, etc.⁴

In the body of the Report examples are given of the development of new inventions, such as the process for making uncreasable products discovered by Tootal, Broadhurst, Lee

¹ *P.E.P. Report*, p. 64. ² *Ibid.*, p. 69. ³ *Ibid.*, p. 110. ⁴ *Ibid.*, p. 10.

and Co. For this "the main field will probably be for women's dress goods and fashion materials," while "other recent inventions of importance are the production of a cotton velvet as light in weight and as soft as chiffon velvet, and the production of 'Rayallen'—a silk-like fabric." Another important development is the introduction of "Lastex Yarn" a material which "has attracted a great deal of attention both in England and on the Continent, particularly in connection with the production of dress material. It is to the development of such new materials that Lancashire must look to compensate for the loss of bulk lines."¹

Thus once again we reach the conclusion that it is here if anywhere that the paradox of poverty in the midst of potential plenty is most strikingly revealed. Of the basic export trades which have been so hardly hit since the war, the textile trades are the only ones which are directly and solely engaged in making consumers' goods; all the rest, even including the coal industry, are predominantly concerned with making producers' goods, so that the "potential plenty" is not immediately apparent. In Lancashire's case, however, it is overwhelmingly clear that the surplus capacity available is capable of producing a vastly increased output of furnishing fabrics and dress materials; and it is in respect of these, and particularly the latter, that a substantial proportion of our population is at present so sadly lacking.

The woollen and worsted trades have also been badly hit since 1924 by the contraction of the export trade, and in 1934 16 per cent of the workers in the industry were unemployed. Exports of woollen and worsted tissues in 1934 were only 100 million square yards, as compared with 220 million square yards in 1924. The fall in exports, however, has been partially offset by an expansion in production for the home market, total production having fallen only from 440 million square yards in 1924 to 380 million square yards in 1934.

Detailed figures of surplus capacity, similar to those just given for the cotton industry, are unfortunately not available, but there is sufficient evidence to show that it must be fairly

¹ *P.E.P. Report*, p. 101.

considerable. According to Mr. A. N. Shimmin, loom activity in 1928 was only 63 per cent of capacity,¹ while according to Prof. G. C. Allen production in that year was estimated at 410 million square yards.² Since production in 1934 was only 380 million square yards, it is reasonable to assume that surplus capacity in that year would have been at least as great as in 1928.

This estimate of the amount of surplus capacity available is corroborated by the statement of the managing director of Salts (Saltaire) Ltd. at the annual meeting in 1930 that "the average standing looms throughout 1929 in the Bradford area is 40 per cent."

Further evidence of the continued existence of idle capacity was provided by the formation in 1933 of the Woolcombers' Mutual Association "to assist the woolcombing industry by the purchase and dismantling of redundant and obsolete mills, plant and machinery for resale under restrictive covenants against their further use for woolcombing." To finance its operations the Association raised £346,500 of debentures, the interest and sinking fund on which are met by a levy on all mills in production.

So far as the finishing trades are concerned we have already referred to the speech of the chairman of the Bradford Dyers' Association. The firms comprising this Association, although mainly concerned with cotton piece-goods, are also engaged in the finishing and dyeing of artificial silk and woollen and worsted goods.

(8) *Miscellaneous Expenditure and Output*

Turning now to miscellaneous expenditure, it is impossible to give more than a very general indication of the unused productive capacity available. This expenditure is composed of a large number of very diverse elements ranging from the purchase of furniture on the hire-purchase system to trade union subscriptions. Even for that part of the expenditure which is spent on the purchase of goods, as opposed to services, there are no figures available as to the amount of unused

¹ *Britain in Depression*, p. 358.

² *British Industries*, p. 266.

capacity available in the industries producing those goods. We must therefore content ourselves with giving the figures for the percentage of workers unemployed in such industries and in certain industries engaged in supplying services, and these are shown in Table XVII.

TABLE XVII

Percentage Unemployed in 1934 in Various Industries supplying Consumers' Goods and Services

<i>Consumption Goods Industries</i>				<i>Percentage</i>
Furnishing and Upholstery	...	...	...	13
Wallpapers	...	...	...	8
Oilcloth, Linoleum, etc.	...	...	...	13
Carpet Trades	...	...	...	5
Brushes and Brooms	...	...	...	14
Oil, Glue, Soap, Ink, Matches	...	...	...	11
Pottery	...	...	...	21
Glass (except bottles)	...	...	...	13
Watches, Clocks and Jewellery	...	...	...	10
Toys and Sports Requisites	...	...	...	10
Musical Instruments	...	...	...	11
<i>Industries Supplying Services</i>				
Distributive Trades	...	...	...	11
Hotels, Restaurants, etc.	...	...	...	15
Entertainments and Sports	...	...	...	20
Laundries and Cleaning	...	...	...	8
Road Transport (other than trams and buses)				19

As will be seen from these figures there was a considerable reserve of labour unemployed in practically all the industries included in the table. We have already seen that the increase in output in industry generally between 1934 and 1937 considerably exceeded the increase in employment, and that in the case of the textile trades, for which independent figures of productive capacity are available, the percentage of capacity unused was considerably greater than the percentage of workers unemployed. Therefore it is not unreasonable to suppose that the same will be found to be true in the industries under consideration, and that any increase in employment will be accompanied by a more than proportionate increase in output.

It is true of course that we cannot assume that the whole of the unemployed in any particular industry can be considered

as available for continuous employment. Even under optimum conditions there will always be at any particular moment a small residue of workers who, if they are not technically "unemployed" are at any rate temporarily "out of a job." The number of workers so unemployed may amount to as much as 2 per cent of the whole, even in times of exceptionally active trade. This, however, is likely to be more than compensated for by the absence of short time (to say nothing of the working of overtime) among those employed.

In actual fact the industries making consumers' goods are in the main the newer and lighter industries employing mainly unskilled labour, and the experience of recent years shows that where sufficient demand is forthcoming these industries can be expanded at a truly astounding rate. The astonishing growth of the motor car and artificial silk industries, and more recently of industries manufacturing such articles as radios and refrigerators, are examples of this. In fact, all the evidence points to the conclusion that the important factors on the supply side in determining the rate of expansion of this type of industry are (1) an adequate supply of *unskilled* labour; and (2) surplus capacity in the industries making capital goods. The amount of unemployment and of unused capacity in the light industries themselves are relatively unimportant.

This, after all, is only what one would expect. The important factors in determining a country's productive capacity are its labour force, its industrial equipment, and its ability to obtain the necessary supplies of raw materials. Skilled labour is most important in the industries producing capital goods. If a country has well-developed iron and steel and engineering industries (particularly those producing machine tools), together with the skilled workers necessary to work them, it can expand its output of consumption goods very rapidly indeed if the requisite demand is forthcoming. Even its ability to obtain raw materials, in so far as it relies on overseas supplies, is to a large extent dependent on its capacity to turn out industrial goods quickly, cheaply and efficiently, and this in turn is bound up with the efficiency of its capital goods industries. The experience of Russia has shown that the diffi-

cult task, on the technical side, in expanding the output of consumers' goods is the building up of the appropriate heavy industries. This is a task that demands considerable sacrifices while it is being undertaken, not only because of the diversion of material resources from the production of immediately consumable goods, but also because of the necessity to train cadres of skilled industrial workers who can use the new machines when they are made. Unfortunately, as Russia has found to her cost, technical and industrial skill cannot be acquired in a day.

Once, however, this difficult task has been achieved, the expansion of the supply of consumers' goods should be relatively simple, and in Britain, where the workers have a heritage of industrial skill unsurpassed in any country, and where even the so-called unskilled workers have a level of general education far surpassing that of most other countries, it should be particularly easy. We need not, therefore, be unduly disturbed by the fact that the *existing* unused productive capacity in the industries producing consumption goods is perhaps not sufficient to provide the output necessary to achieve our reasonable standard, provided that there is a surplus of capacity in the industries producing capital goods, and a surplus of labour either skilled or unskilled, which can be transferred to the new industries as these are developed. In Britain in 1934 both these conditions were fulfilled. Throughout 1934 there were over 2,000,000 unemployed, constituting about one-sixth of the total number of insured workers, and there were still over 1,300,000 workers unemployed in the second quarter of 1937, although production had increased by 26 per cent. There can be no doubt that even in that period of (relative) boom conditions there were large numbers of workers only too anxious to work if work could have been found for them.

What of the other condition, the existence of surplus capacity in the industries producing capital goods? We have already seen that it is precisely these industries which showed the greatest increases in output between 1934 and 1937. Taking the figures for the highest quarter of 1937, we see that the iron and steel industries show an increase of 53 per cent, the non-ferrous metal industries one of 42 per cent and engineering

and shipbuilding one of 46 per cent. It is obvious from these figures that the unused capacity available in these industries in 1934 must have been very considerable, and there can be little doubt but that it was more than sufficient to provide for the expansion of the consumption goods industries necessary to achieve our reasonable standard.

It is true that the coal industry showed a very small increase in output in 1937 as compared with 1934, but we have already seen that the potential output of that industry is in excess of any demand that is likely to be made upon it.

(9) *Iron and Steel*

It is also true that, in the case of the iron and steel industry, there has been a great deal of reorganization and expansion of capacity in the years since 1934, so that we cannot take the increase in output between 1934 and 1937 as representing the unused productive capacity available in 1934. The production of pig-iron, indeed, was well below the 1913 level even in 1937, but steel production surpassed all previous records. It would, however, appear that the new plant that has been erected in recent years did not materially affect output before 1937. The *Economist* in its annual review stated that "during 1936 the industry has felt the long delay in plant modernization and in the instalment of new capital equipment, and has had to consider to what extent it should now undertake large schemes of expansion, the fruits of which could hardly be reaped until after a delay of a year or two."¹ In other words, during 1936 the industry was producing about as much as was possible with the existing capacity, but, on the other hand, the process of modernization had still a long way to go. (It is worth noting that, even in 1936, nearly one-sixth of the steel workers were unemployed.) We can therefore take the actual output in 1936 as giving an upper limit to the potential output in 1934, and on this basis production in 1934 could have been increased by one-third. As a lower limit, we can take the steel furnace capacity in 1929, which was 11 million tons, or 25 per cent

¹ The *Economist*, Commercial History and Review of 1936, p. 51.

greater than the actual output in 1934. We can therefore conclude that the possible steel output in 1934 was between one-quarter and one-third greater than the amount actually produced.

In 1934, the industry badly needed reorganizing and modernizing. This was particularly true of the production of pig-iron, as the average size of the blast-furnaces was far too low for efficient production. Since then, however, as we have already pointed out, the process of modernization has gone on apace, and the *Economist* in its review of 1938 was able to report that "no less than two-thirds of the blast-furnace capacity existing in 1936 has now been replaced by modern plant."¹ As a consequence, we can give actual figures of the increase in productive capacity so far attained as a result of modernizing the plant existing in 1934, instead of contenting ourselves with mere indications, as we were compelled to do in the case of the coal and cotton industries; and Table XVIII compares the productive capacity at the end of 1937 and 1938 with the actual production in those years and in 1934. It also shows the percentage of workers unemployed in the three years.

TABLE XVIII

Year	PIG IRON			STEEL INGOTS and CASTINGS		
	Production	Capacity (in million tons)	Percentage of workers unem- ployed	Production	Capacity (in million tons)	Percent- age of workers unem- ployed
1934	6.0	9.0 (?)	25	8.9	11.5 (est.)	26
1937	8.5	9.2	10	13.0	14.3	11
1938	6.8	10.1	16	10.4	14.5	21

The table also brings out very clearly the fact that the re-organization and expansion has accentuated the danger of

¹ The *Economist*, Commercial History and Review of 1938, p. 52.

surplus capacity arising as soon as any recession in trade occurs. In 1938, the industry was working to only 70 per cent of capacity in spite of the special stimulus afforded by rearmament. It has been estimated¹ that 3 million out of the 13 million tons of steel produced in 1937 may be attributed to the rearmament programme. Even if there were no increase in the rearmament demand in 1938, this means that, in that year, the civil demand absorbed only 44 per cent of the industry's capacity. It is clear that if rearmament were to cease (or to be cut down) the iron and steel industry could easily supply all the output required for any expansion of the light industries that might be necessary to provide our reasonable standard.

In spite of the modernization of the industry that has gone on in recent years, there is still scope for considerable further improvement, as is shown by the following extracts from an article on "The Steel Industry's Efficiency" which appeared in the *Economist* at the end of 1938:²

... The technical efficiency of the British industry is still considerably behind that of other countries. . . . A large proportion of coking capacity is still, however, obsolete. Out of a total capacity of rather more than 22,000,000 tons per annum, only 6,720,000 tons consists of installations capable of over 20 tons per oven per day (i.e. efficient modern plants), while about 10,125,000 tons is still in ovens of less than 10 tons per oven per day and as much as 4,300,000 tons consists of the entirely obsolete waste heat ovens. . . .

Improvements are thus being made in fuel economy. But the British figures are still a long way behind those of other countries. The consumption of coke per ton of pig iron and ferro-alloys in 1936 was 19·6 cwts. in Germany and 19·0 cwts. in Belgium. In the United States consumption of coke per ton of pig iron, excluding ferro-alloys, was 18·06 cwts. in 1937. The British figure for 1937 (including ferro-alloys), as already quoted, was 22·77 cwts. . . .

... The fact remains that the average size of British blast furnaces is still almost certainly too low for maximum efficiency. In the case of open hearth steel furnaces the proportion of total capacity represented by furnaces large enough to produce more than seventy-

¹ *Britain in Recovery*, section on the Iron and Steel Industry, by E. D. McCallum, p. 372.

² The *Economist*, December 17th, 1938.

five tons per heat has risen from a quarter to a half. This is rapid improvement, but the proportion is still small.

(10) *Food Supplies*

So far we have been concerned with the output of industrial goods, and we have shown that it is a reasonable assumption that in 1934 there was sufficient surplus capacity either to produce immediately the goods necessary for our reasonable standard, or to enable the necessary development of the consumption goods industries to be brought about fairly speedily. We have still, however, to deal with the question of how to obtain the increased food supplies necessary to achieve our standards.

The total increase in food expenditure necessary to achieve the reasonable standard is 21 per cent, but the increase in quantity will not be quite so great as this owing to the fact that people in the higher income groups tend to pay more for a given quantity of food than do those in the lower groups. This explains the fact that the increases in the consumption of individual items of food given in Table XII on p. 58 (which refers to increases in quantity) appear rather low as compared with the figure of 21 per cent given for the total increase in expenditure on food.

This table shows that the greatest increases are required in milk and milk products, eggs, fish, fruit and vegetables. For meat and sugar intermediate increases of 12 per cent and 8 per cent are required, while in the case of bread and potatoes the increases are purely nominal. Over a half of our total food supplies are imported, but the proportion varies considerably for the different items. In the following table we show the proportion imported for the main items in which an increase is desired.

Of the items in this table, milk is the only one which is entirely produced at home. This, of course, is due to the difficulties of transporting and storing liquid milk, and we may therefore assume that the whole of the desired increase will of necessity have to be produced in this country. How far is such an

TABLE XIX

Percentage of Total Supplies imported in 1934

					<i>Percentage</i>
Beef and Veal	...	...	...	...	51
Mutton and Lamb	...	...	...	...	57
Bacon and Ham	...	...	...	...	81
Total Meat (including other kinds)					53
Eggs	...	...	...	...	38
Fish	...	...	...	...	19
Milk	...	...	...	...	—
Butter	...	...	...	...	89
Apples	...	...	...	...	40
Other Fruit	...	...	...	...	83
Vegetables (excluding Potatoes)				...	27
Sugar	...	...	...	...	75

increase possible at the present time? According to the Milk Marketing Board, the quantity of milk sold during the year October 1934 to September 1935 was 1,100 million gallons, of which two-thirds was sold as liquid milk and one-third for manufacture. Thus, the consumption of liquid milk *could* be increased by as much as 50 per cent if the whole supply were devoted to that purpose. At present as the Report of the Milk Reorganization Commission points out, milk is sold for manufacture at substantially below the cost of production (the loss being recouped by charging high prices for liquid milk), in order to enable the manufactured milk products to meet the competition of imports. It seems clear, therefore, that the amount of liquid milk could easily be expanded by 16 per cent, and any consequent reduction in home produced butter and cheese made up by increasing our imports of these products.

If total milk production remained unchanged, and the consumption of liquid milk increased 16 per cent, the amount available for manufacture would be reduced by 32 per cent, or approximately 120 million gallons. The milk equivalent of imported milk products in 1935 was 2,820 million gallons,¹ so that an increase of 5 per cent in imports would be needed to compensate for the reduction in the home production of milk products.

¹ Report of the Milk Reorganization Commission (Great Britain) p. 162.

There is little "unused productive capacity" so far as milk is concerned, in the sense of "idle" cows that could be brought into production if the necessary demand were forthcoming. The volume produced depends on the number of cows and the yield per cow. Since it takes over three years to increase the supply of milk by breeding more dairy cows no large *immediate* expansion of home production is possible unless the yield per cow is increased;¹ but in view of the large surplus of milk at present used for manufacturing this need present no obstacle to increasing the consumption of liquid milk. It does mean, however, that our desired increase in the consumption of butter and cheese would have to be met by increasing our imports of these commodities, at any rate for some years.

Let us next consider that most important item in the Englishman's diet—eggs, of which 7,000 million were consumed, directly or indirectly, in 1934, and in which an increased consumption of 18 per cent would be necessary to bring the lower income groups up to the level of Group IV. Egg production has expanded very rapidly in this country since the war, and in 1934 amounted to 4,800 million, or nearly double the 1924 figure. Since 1934 there has been a slight decline, due partly to a rise in costs and partly to the increased competition of imports, but there is no reason to believe that the previous rapid rate of expansion could not be maintained, or even accelerated, if the demand were forthcoming. Even if the extra consumption could not be met by increased home production, there should be no difficulty in expanding imports. Indeed the Government's main concern in recent years seems to have been to keep the latter down!

In 1930, 3,200 million eggs were imported, but the imposition of specific duties equivalent to between 10 and 15 per cent on foreign imports, and of a 30 per cent *ad valorem* duty on imports from the Irish Free State, caused imports to decline to 2,200 million in 1934. By 1936, however, they had again

¹ According to an answer by the Minister of Agriculture in the House of Commons, some increase in milk production could be achieved in rather less than a year, by continuing the use of cows which would normally be drafted out of the dairy herd. (Reported in the *Manchester Guardian*, March 20th, 1937.)

increased to nearly 3,000 million, despite the fact that the British Government had succeeded in negotiating a "voluntary" agreement with the Governments of the principal exporting countries for a progressive reduction of imports during 1934 and 1935. Although the 25 per cent expansion that occurred in 1936 was in part due to the fact that some of the overseas producers experienced exceptionally fine weather conditions, there can be little doubt that if the duties were removed egg imports could be increased by the 1,300 million over the 1934 figure (i.e. to a total of 3,500 million) which would be necessary if there were *no* increase in home production. If, however, the view expressed by a writer in the *Economist*¹ be accepted that "it is possible to envisage self-sufficiency in eggs at no very distant date if foreign supplies are entirely shut out," which would imply an increase in home production of some 3,000 million eggs merely in order to maintain current consumption, then it is clear that our desired increase could be considerably exceeded without any increase in imports.

From eggs our thoughts naturally turn towards bacon. Imports of this essential constituent of the Englishman's breakfast have been regulated by quota since 1933 with the object of stabilizing the total supply of bacon (including hams) at the average level of the years 1925 to 1930. The result has been that imports from foreign countries fell by 4,800,000 cwt. between 1932 and 1934, but since Empire imports increased by 900,000 cwt., the reduction in total imports between these two years was only 3,900,000 cwt. Owing, however, to the great rise in prices which occurred as the result of the restriction of imports, overseas producers received as much for the reduced amount they supplied in 1934 as they had for the much greater quantity supplied in 1932.

The increase necessary to achieve our reasonable standard is only 9 per cent, or 900,000 cwt., and it is clear that this could have been obtained merely by modifying the operation of the quota system, probably without any increased cost. Quite apart from this, home production increased by over 1,000,000

¹ "Can Britain Feed Herself?"—The *Economist*, December 5th, 1936.

cwt. between 1934 and 1936, so that there can be no doubt that consumption could have been increased by considerably more than 9 per cent without encountering difficulties on the supply side.

A somewhat similar position is found with regard to other forms of meat. In order to assist the Dominion producers the British Government undertook, under the Ottawa Agreements, progressively to reduce foreign imports of frozen beef, mutton, and lamb so that by 1934 they should amount to only 65 per cent of the pre-Ottawa figure in the case of frozen beef, and 60 per cent in the case of frozen mutton and lamb, while imports of foreign chilled beef were not to exceed the pre-Ottawa figure. This, however, did not help the British farmer sufficiently, and, in order to assist him further, the Government negotiated a "Gentlemen's Agreement" with the South American exporting countries, under which they consented to reduce their exports of chilled beef to this country by approximately 10 per cent. The net result was that imports of foreign chilled and frozen beef in 1934 were about 1,750,000 cwt. less than the average for the three years preceding Ottawa.

In 1936, a new agreement was concluded with the Argentine, under which she agreed to the imposition of import duties by this country of $\frac{3}{4}d.$ per lb. on chilled beef, $\frac{2}{3}d.$ per lb. on frozen meat, and corresponding duties—i.e. 20 per cent *ad valorem*—on other beef. Imports of chilled beef from the Argentine were to be further reduced below the 1935 figure.

To achieve our reasonable standard an expansion in the consumption of beef and veal of 13 per cent, or 3,500,000 cwt. per annum, is required. Home production, which had been increasing steadily since 1932, thanks to the fat cattle subsidy and the regulation of imports, increased between 1934 and 1936 by about 800,000 cwt. Imports from the Argentine, which had reached 10,000,000 cwt. in 1927, have shown a progressive reduction in each year since then, and by 1934 they had fallen to 7,000,000 cwt. Since Britain is the Argentine's largest customer for beef, there should be little difficulty in obtaining practically the whole of the 3,500,000 cwt. increase from this source alone if necessary.

Another source of supply is the importation of live cattle from the Irish Free State. Owing to the retaliatory measures taken against the Irish Free State in connection with the dispute over the land annuities, the number of cattle imported for food dropped from a high level of 830,000 in 1930 to 460,000 in 1934. By 1936 it had increased again to 660,000, and it is clear that a further source of supply, equivalent to about 2,000,000 cwt., is available here.

In mutton and lamb a 22 per cent increase is necessary to achieve our reasonable standard, which means an increase in supplies of 2,700,000 cwt. per year.

Foreign imports of frozen mutton and lamb declined between 1929-31 and 1934 by about 900,000 cwt., equivalent to one-third of our desired increase, as a result of the Ottawa agreements.

It is thus clear that there is more margin for expansion in the supplies of beef than in those of mutton and lamb, and it might prove easier to raise total meat consumption by increasing the consumption of beef beyond the level of Orr's Group IV at the expense of a corresponding reduction in the consumption of mutton and lamb.

The other items of food consumption can be dealt with more briefly.

We require an increase of 25 per cent in the consumption of fish. Although in 1934 one-fifth of our total fish supplies were imported yet, according to the *Economist*,¹

Fish is one important item of food which can be provided entirely from British sources. British takings are actually in excess of home demand, and a balance is available for export. In times of peace, Britain's fishing industry could no doubt expand its output still further.

In this connection it is worth noting that in June 1934 one-fifth of the persons employed in the fishing industry were unemployed, so that from the point of view of personnel there would have been no difficulty in expanding output.

As a matter of fact, the takings of fish increased in each

¹ The *Economist*, December 5th, 1936: "Can Britain Feed Herself?"

year from 1934 to 1937, the total increase in the three years being 17 per cent, while the herring catch increased by nearly 50 per cent. As a result of the heavy takings in 1937, the owners of trawlers in the white fish section decided to restrict output by laying up 20 per cent of their vessels, but, even so, and in spite of an exceptionally poor herring season, the total takings of fish in 1938 were still 12 per cent in excess of the 1934 figure.

An increase of 25 per cent is also required in the consumption of fruit and vegetables. So far as these are concerned, it should prove possible to expand home production considerably, for they are just the things which, according to Sir John Orr, the British soil and climate are eminently suited to produce. In a paper given in September 1936 to the Agricultural Section of the British Association on national nutrition and British agriculture he said:

The greatest shortage was in the case of fruit and vegetables. We should begin now to organize agriculture and the distributive trades to produce and handle the much larger volume of protective foods which would be consumed in the future. The production of these foods would bring prosperity to agriculture.¹

Sir Daniel Hall, who followed Sir John Orr in the discussion, stated that:

Sugar beet is now being grown for the [sugar] bounty on land that is naturally fitted for vegetables. Indeed, one of the arguments for its [i.e. the sugar subsidy's] maintenance has been that without it vegetables would become so cheap that smallholders would be unable to live.²

The argument referred to by Sir Daniel Hall indicates one of the problems that will have to be solved if the home production of fruit and vegetables is to be rapidly increased—that of the present large spread between the price received by the grower and the price charged to the consumer. According to the Linlithgow Report, which investigated the marketing of fruit and vegetables:

¹ Reported in the *Manchester Guardian*, September 11th, 1936.

² Ibid.

Fruit and vegetables are unique in the number and variety of intermediaries who may at times be engaged in handling the produce and whose sole service is that of distribution. Occasionally there may be as many as six intermediaries between grower and consumer . . . this may involve as many as sixteen to twenty different handlings of the produce.¹

It is true that the Linlithgow Report was published in 1924, but unfortunately there is no reason to believe that there has been any material change for the better in marketing arrangements since that date. The result of this anarchic and wasteful organization (or lack of organization) of distribution is that even when fruit and vegetables are scarce the grower receives far too small a proportion of the retail price, while when they are plentiful he may receive scarcely enough to cover his cost of carriage. It is therefore scarcely to be wondered at if growers are afraid of an extension of production.

If we leave out of account the possibilities of increasing home production and assume that the whole of the increase in consumption necessary to achieve our standard would have to be imported, an increase in imports to the value of approximately £20,000,000 would have been required in 1934, of which one-third would have been vegetables and two-thirds fruit.

The increase required in the consumption of tea is small, amounting to just over 5 per cent. This of course will have to be entirely imported, and would have necessitated in 1934 an increase in imports to the value of £1.6 million. As tea is one of the commodities which has been (and still is) subject to a restriction scheme in order to reduce "excessive" supplies and so raise prices to a more remunerative level, producers would have no difficulty in meeting the increased requirements.

We also require a 10 per cent increase in the consumption of lard, suet, dripping, etc. Part of this will be made available by the increase in the meat supply, and it will be sufficiently accurate if we assume that the desired increase in animal lard, dripping, etc., is provided in this way and that we need only

¹ *Report on Distribution and Prices of Agricultural Produce: Summary of Conclusions and Recommendations*, §175.

HOW MUCH COULD WE PRODUCE?

make separate provision for increasing the supply of vegetable lard. In 1934 75 per cent of the vegetable lard consumed was imported, and if we assume that the whole of the increase in the consumption of vegetable lard has to be met from imported supplies, this in 1934 would have cost about £500,000.

The only other item of those given separately in Sir John Orr's analysis which we have still to consider is sugar. Taking into account both sugar purchased as such and sugar consumed in jams, jellies, syrups and other forms, the total increase in consumption we have to provide is 8 per cent. The production of sugar beet in Britain has been fostered by means of Government subsidies and by the remission of excise duties, the total cost to the Treasury to date being over £50 million.¹ As a result some 25 per cent of the total consumption is produced at home. As Sir Daniel Hall (to quote only one authority) has pointed out in the speech already referred to, to produce sugar at home on land naturally fitted for vegetables is definitely uneconomic, and we shall therefore assume that the whole of the increased consumption is met by increasing imports. The cost in 1934 of the necessary additional imports would have been £1,400,000.

The countries producing cane sugar have been very badly hit by the safeguarding and subsidization of beet sugar by the European countries, especially as their own production has been rapidly increasing as a result of scientific research and development, and there can be no doubt of their ability and willingness to increase their exports to any country willing to take them. In fact the capacity of the sugar exporting countries to produce is so much in excess of the demand of the importing countries that an International Sugar Council has been set up, composed of representatives of the importing, cane sugar producing, and beet sugar producing countries, to regulate exports by apportioning export quotas to the various countries concerned.

From the foregoing discussion it is clear that no precise estimate can be made of the increase in the imports of food-

¹ See pages 208-10 for a fuller description of the cost of the sugar beet subsidies.

stuffs that would be required to achieve our reasonable standard, as this is dependent on the extent to which it proves feasible to expand home production. We have therefore thought it best to give *two* sets of estimates, one based on the assumption that no increase in home production takes place, and the other based on the estimates given above for the increases in home production that might reasonably be expected. These estimates are given in Table XX.

TABLE XX

Increases in Imports of Food that would have been necessary in 1934 to achieve the Reasonable Standard

<i>Food</i>	<i>Value of Imports in 1934 (£m)</i>	<i>Increase in Imports on assumption:</i>	
		<i>(a) No increase in home production (£m)</i>	<i>(b) Home production increased as above (£m)</i>
Beef and Veal	18.9	8.3	7.0
Mutton and Lamb	17.5	4.8	4.8
Bacon and Ham	33.2	3.6	—
Other Meat ...	10.1	.7	.7
Total Meat ...	79.7	17.4	12.5
Eggs	7.1	4.0	—
Butter	33.3	5.5	5.5
Cheese	7.0	5.3	5.3
Tea	27.9	1.6	1.6
Lard	3.9	.5	.5
Sugar	13.7	1.4	1.4
Fruit	36.2	12.7	9.2*
Vegetables ... (excl. Potatoes)	6.6	6.1	—*
Total	215.4**	54.5	36.0

* The estimates for the increase in home production of these two items must be largely guesswork; we have assumed that all the required increase in vegetables and in apples is produced at home but that the whole of the rest of the increase in fruit consumption is met by increasing imports.

** This is only the total of the particular items for which increases in imports are required. The total imports of food in 1934 amounted to £326 million.

This table shows that in round figures an increase in our

imports of foodstuffs of between £35 million and £55 million would have been necessary in 1934 to achieve our reasonable standard. Our total retained imports in that year were valued at £680 million, so that the required increase is approximately between 5 per cent and 8 per cent, and the question immediately arises as to whether we could expand our exports sufficiently to pay for such an increase.

Foodstuffs, however, are not the only commodities of which increased imports would be required. The increased expenditure contemplated by our standards would necessitate also increases in our imports of raw materials and probably also in those of wholly or partly manufactured goods. There is therefore little point in considering foodstuffs alone. We must also estimate the increase in the imports of other commodities that would be required, and then see whether we could expand exports sufficiently to pay for all the increased imports we desire. Before doing this, however, it will be as well to investigate briefly the longer term potentialities of British agriculture, in order to get some indication of how far the desired increase in foodstuffs could ultimately be produced at home.

(II) *Can We Grow More Food in Britain?*

One cannot speak of "surplus" productive capacity in agriculture in the way in which the term is applied to industry. Although there is a certain amount of waste land, and there is undoubtedly unemployed labour, yet the main problem in agriculture is rather to raise the productivity of land already in use rather than to bring definitely waste land under cultivation. This must of necessity be a gradual process, depending as it does on such diverse factors as the progress of research, the education of farmers in the use of new methods, and the financial facilities available to farmers wishing to introduce such methods. In these circumstances it is perhaps not surprising that there is a considerable divergence of opinion as to the extent to which agricultural production could be increased in this country. We have already quoted Sir John Orr's plea at the British Association for the planning of agriculture to

produce a much larger volume of the protective foods, especially fruit and vegetables; and Sir Daniel Hall's statement that land that was naturally fitted to grow vegetables was being used to grow sugar beet. These two experts would thus appear to take the view that home food production, particularly of the protective foods, could be greatly increased.

Prof. H. D. Kay, at the same meeting, dealt specifically with the question of milk production. He calculated that to raise the average level of milk consumption from the current level of .42 pints per head per day to the full pint would need an additional 1,200 million gallons a year. He went on to say that, "There is no doubt that dairy farmers of this country could eventually meet this demand, but it would require a period of years, possibly as much as a decade, effectually to do so."¹ Since the increase required to achieve our reasonable standard is only 120 million gallons a year, or one-tenth of the increase suggested by Prof. Kay, one can reasonably assume that this could be achieved in considerably less than ten years. Incidentally, this reveals how very low even Sir John Orr's standard is in regard to milk consumption; even with the proposed increase it would still be under half a pint a day per head, as compared with the pint generally regarded by experts as desirable.

At the 1937 meeting of the British Association the question of planning the land of Britain was discussed; and Dr. L. Dudley Stamp, Reader in Economic Geography at London University and Director of the Land Utilization Survey, expressed the view that if it should be essential for Britain to be as self-supporting as possible the land *could* be reconditioned within the limits imposed by natural factors alone, so as approximately to double the country's productive capacity in foodstuffs.² He pointed out that in addition to the natural factors there were also historical factors which tended to stabilize the use of land as parkland or common land, but even when all due allowance is made for these factors it may be presumed that a considerable increase in the existing output

¹ Reported in the *Manchester Guardian*, September 11th, 1936.

² *Ibid.*, September 8th, 1937.

of foodstuffs could be obtained if the necessary steps were taken.

This view is confirmed by the statement of Sir Daniel Hall at the same meeting that:

It is easy to envisage the planning of the land of Great Britain to ensure an increase in its productivity and population if it could be treated as a great estate managed by a business corporation with ample capital to enable it to take a long view about development. Such a plan can only be attained under the national ownership of the land. A plan is necessary not only in the broad national interests of production but also to prevent the short-sighted destruction of the most valuable agricultural land and of the amenities of the countryside which is everywhere going on to satisfy immediate urban requirements. British land is too limited and too precious to be left to the unrestricted play of commercial exploitation.¹

A similar view has been expressed in an article in *Planning*, the fortnightly broadsheet of P.E.P.:

At present much fertile land, agriculture's most essential raw material, is being arbitrarily and messily absorbed by other industries, and by housing, while relatively poor land is going out of cultivation and a great deal of good or medium land is producing far less than it should owing to neglect or to want of capital and skill. It is doubtful if there is a single full-time consultant agricultural engineer in the country.²

Later in the same article the writer points out the loss that occurs every year as a result of diseases among dairy cows that are at least partly preventable:

It would be worth while to spend a very large amount of public money on eliminating at least part of the annual loss of several million pounds due to mastitis, abortion, sterility, tuberculosis, and Johne's disease. Prof. Scott Watson has estimated that if these diseases were eliminated the average milking life of a dairy cow might be raised from less than four years to something like seven years. The present expenditure on agricultural research and raising of standards is . . . not nearly adequate.³

¹ Reported in the *Manchester Guardian*, September 8th, 1937.

² *Planning*, No. 99, p. 2.

³ *Ibid.*, p. 10.

The result of eliminating these diseases would thus be to increase milk production by something like 75 per cent. Although a complete elimination may be too much to hope for, yet one might reasonably expect an increase substantially greater than the 16 per cent necessary to achieve our reasonable standard.

Considerable interest has recently been aroused in the work of Prof. R. G. (now Sir George) Stapledon on increasing food production by the improved farming of grassland. His work has been quoted in Parliamentary debates on agriculture both by the Minister of Agriculture and by Opposition speakers, and it may be presumed that it forms the basis of the Government's policy of subsidizing the production of basic slag and other fertilizers. An interesting examination and summary of this work is to be found in an article on "Grassland and Food Policy" in another of the broadsheets of P.E.P., from which the following extracts are taken:¹

Public opinion is coming more and more emphatically to back the views on nutrition of which Sir John Orr has been the chief spokesman, and the views on grassland improvement formed as a result of innumerable scientific experiments by Prof. R. G. Stapledon. It is, moreover, putting these two views together and finding a welcome agreement between the extra cheap supplies which the consumer is shown to need, in the first case, and the extra cheap supplies which the producer, with the aid of recent discoveries, is shown able to produce, in the second. . . . Prof. Stapledon and others have shown that British grasslands are potentially one of our greatest and actually one of our most neglected assets.

British soils and climate, which have generally been a liability for cereal production, are ideal for dairying and stock-rearing based upon intensive grass farming. Grass, however, has in very many cases not been farmed: it has just been left to grow without any appreciation that it is one of the most valuable and complex of our crops, and repays scientific care as richly as any other. . . .

Nearly a third of the land surface of Great Britain is under permanent grass and another third under rough grazings. Only a small part of this vast acreage of grassland is in even tolerable condition, according to the standards set by recent experiments. Much of the

¹ *Planning*, No. 77, pp. 2-5.

better land is suffering so much from mismanagement and neglect that its grazing no longer yields weight increases in the livestock upon it of sufficient value to cover a low annual rent. The reaction of too many farmers has been to demand rate and tax reliefs, subsidies, quotas, and tariffs, which will enable these high-cost and slipshod farming methods to hold their own, instead of undertaking that root-and-branch overhaul of farming methods which could undoubtedly enable competition to be met and profits to be made through an increased value of production per acre.

On many British farms such improvements are already taking place: the problem is not to realize Utopian dreams but to bring the average and below-average farms up to the standard already realized by the minority of progressive farmers. The great contribution of the grassland improvers is that they have shown a way to raise substantially the value of British farm production per person employed and per acre, and have offered the farmer a method of increasing his income and that of his workers by farming rather than by political bargaining. Instead of protesting at the importation of cheap foreign foodstuffs for the benefit of poor families, the farmer now has the opportunity of producing at lower cost foods for which there is an eager market, provided the price to the consumers can be brought low enough.

A colossal task now faces the British farmer in undoing the results of years of neglect and mismanagement, due to ignorance of the essential conditions of farming grassland. If Prof. Stapledon is right, the whole system of permanent grass which dominates British agriculture is, except in a few highly favoured areas, causing a grievous loss of fertility and increased risk of disease. He would plough up by far the greater part of this permanent grass and turn it into leys of three to six years' duration, resowing it with carefully selected grass seed after each ploughing, and giving it plenty of lime, phosphates and animal manure. Such treatment, he states, will build fertility to an astounding extent.

Prof. Stapledon has carried out and published a survey of the whole of the agricultural and waste lands of Wales, and he states his conclusions as follows:

If improvements in the grasslands of the Principality [of Wales] such as have been discussed in this work were carried into effect, it is likely that Wales could more than double her present stock-carrying capacity in terms of both cattle and sheep. It is, moreover,

likely that this could be brought about without any fundamental change in her rural sociology. On the other hand, if we turned to really intensive improvements, with a great deal more crop production, which would have to be accompanied by a vastly increased agricultural population, we could still further and very greatly increase food production, and at the same time bring about even greater improvements on all fields either temporarily or permanently under grass.¹

There is clearly no doubt as to Prof. Stapledon's views on the possibilities of increasing our food production. If his views be accepted, there would appear to be no question as to our capacity to obtain an addition to our food supplies considerably in excess of that required for our reasonable standard, even without having recourse to his "really intensive improvements." Nor, apparently, would the improvements to grassland that he suggests take many years to complete, once the task had been undertaken.

Prof. Stapledon has also carried out a great deal of experimental work on the possibilities of grass drying. By drying summer grass in special grass-drying machines it is claimed that its nutritional value as a feeding stuff for cattle is greatly increased. At present opinion among the experts appears to be divided as to the commercial practicality of these machines, the main difficulty at present being the large initial cost; but there can be no doubt as to their potentialities for future food production.

That the importance of grass improvement is realized in official circles is shown by the following extracts from a report in *The Times* of a speech in the House of Commons on June 7th, 1936, by the then Minister of Agriculture, Mr. W. S. Morrison. After quoting a reference to Prof. Stapledon's work at Aberystwyth *The Times'* report continues:

The grass yield could, without undue strain, be increased by as much as 15 per cent. That would be equal to the addition of 3,000,000 acres of pasture, or, on the basis of three acres to a cow, food for 1,000,000 more cattle.

¹ *Survey of Agricultural and Waste Lands of Wales*, by Prof. R. G. Stapledon, pp. 101-2.

In reply to Mr. Lloyd George, Mr. Morrison said that his estimate was authoritative, though he could not at the moment say whose estimate it was.

Mr. Lloyd George: It is certainly not Stapledon's estimate.

Mr. Morrison said that by an immense effort and the expenditure of large sums they could get a much bigger increase. His estimate was of an increase which could be obtained without undue strain; the country could take it in its stride if it applied itself properly to the problem. . . . An investigation by the Milk Board showed clearly that properly used grass cost less than half of any other foodstuff. The extent to which the quality and yield of grass could be extended was the measure of the gain to the producer and the nation.

There had been many experiments in grass drying, and there need no longer be any doubt of the quality, from the nutritive point of view, of the product of the grass-drying machine. Its food value approached that of concentrates, and it had in it certain elements making for health. As yet the machines were too dear for the ordinary man, but by co-operation much might be done to make the machines available by trying to spread the cost. Necessary, too, was the development of a farm technique. But sufficient had been done to show that the product of dry grass was of extreme value to our cattle and our agriculture.¹

Mr. Morrison's reference to the question of cost and to the necessity of developing farm technique raises a further consideration of great importance from the point of view of the long-term possibilities of increasing food production, namely, the very low level of existing farm equipment and agricultural efficiency. The present position is well described in two further extracts from *Planning*:

Much of the permanent equipment of farms in the form of buildings, roads, and fences, is obsolete. Apart from isolated efforts and a certain amount of patching here and there, very little has been done since 1880 in the way of reconstruction to increase the efficiency or reduce some of the drudgery of farm labour; to cater for the cleanliness and health of livestock and livestock products; or to provide storage for crops, immune from wastage and from the ravages of rats and other pests; not to mention the modernizing

¹ The *Times*, June 8th, 1937.

of dwelling houses and farm cottages. . . . No solution has yet been found to the vital problem of the relation of agriculture to the rest of the community in the use of the land. Agriculture gets merely what is left when everyone else has staked out a claim. The test of the soundest claim in the past has not been social benefit but the ability to pay. The outcome is an indescribable picture of muddle and waste in which the real interest of the land, of farming and of society has been left entirely out of account.¹

Neither farmers nor landowners are at present in a position to take full advantage of the opportunities which science is putting at their disposal. Both are hampered by clinging to the relics of feudalism and to methods which, being bound up with the drudgery of manual labour, tend to perpetuate that drudgery rather than to enable the farmer and land worker to escape from it, as urban workers to a large extent do, with the aid of labour-saving machinery. Both agricultural co-operation and large-scale and scientific land management may seem remote, but one if not both will have to come before farmer and farm worker can enjoy a better income, and the consumer can enjoy more fresh foods at a low cost.²

Mr. C. S. Orwin expresses a similar view in his book *Future of Farming* when he speaks of "the immense wastage of land and labour represented by the tens of thousands of miles of superfluous hedgerows, spoiling productive land, harbouring weeds and vermin, shading the crops from the ripening sun, employing men in unproductive labour, and restricting the free movement of implements. . . . In every county of England hundreds, if not thousands, of acres of arable land are withdrawn from productive use to provide unwanted field divisions. . . . Nowhere has the farming unit been laid out to give full scope to mechanical aids to labour, nowhere has the science of specialization in labour and management been applied."³

It is clear from the foregoing that the country's food production could be very greatly increased by the application of scientific methods. We have already quoted Dr. Dudley Stamp's estimate that the land could be reconditioned so as to double the output of foodstuffs, so far as the limits imposed

¹ *Planning*, No. 43, p. 7.

² *Ibid.*, No. 77, p. 9.

³ C. S. Orwin: *Future of Farming*, pp. 98-9, 101.

by natural factors are concerned. Dr. Julian Huxley, in his book *Scientific Research and Social Needs*, says that several research-men have told him "that a doubling of the present amount of food grown in this country was not only perfectly possible, but a modest estimate of what could be achieved by applying the scientific knowledge which exists." Without ourselves venturing any quantitative estimate of the increased production to be obtained by large-scale scientific management we can be reasonably certain that it would be far in excess of that necessary for our reasonable standard.

(12) *The Problem of Imports*

Having explored some of the long-term possibilities of increasing production by the scientific organization of our agriculture, we must return again to the more immediate prospects. We have estimated that an increase of between £35 million and £55 million in our imports of foodstuffs would have been necessary in 1934 to achieve our reasonable standard. We must now see what other imports (of raw materials, etc.) would be required, and whether our exports could be expanded sufficiently to pay for them.

We have already seen that an increase of 20 per cent in the 1934 national income is necessary to achieve our reasonable standard. If this increase were uniformly spread over all articles of consumption, we could assume as a first approximation that an increase of 20 per cent in our imports would also be required. Now it so happens that the increase is uniformly spread so far as the division between food and non-food expenditure is concerned—that is to say, an increase of approximately 20 per cent in each of these two categories of expenditure is required. We can therefore assume as a first approximation that an increase of 20 per cent in the non-food imports will be required, which we may take for this purpose as including all the commodities in the groups called in the Board of Trade's classification "Raw materials and articles mainly unmanufactured," and "Articles wholly or mainly manufactured."

These two groups of imports were together valued at £342 million in 1934, so that an increase of 20 per cent would require an additional £68 million.

Unfortunately for our calculations, however, we cannot assume that the increase in expenditure is evenly spread over all articles of consumption. Nor can we even assume that if it were a corresponding increase in imports would be necessary; for the main purpose of this chapter has been to examine how far the increased consumption could be met out of our own unused productive resources. This does not necessarily preclude any increase in the imports of completed manufactured goods, but it does presuppose that only such goods as cannot be made with our own unused productive resources will be imported. It is therefore reasonable to suppose that an increase in imports of less than 20 per cent would be necessary.

This supposition is supported by the fact that, although an increase of 21 per cent in the expenditure on foodstuffs is required, the corresponding increase in food imports is not more than 17 per cent, and may be as low as 11 per cent. We have seen furthermore that agriculture is the one industry in which the unused productive capacity which can be brought *immediately* into use is for all intents and purposes negligible, so that we should expect *a priori* a greater increase in imports for a given increase in expenditure in the case of food than we should in the case of other categories of expenditure.

We may therefore conclude that the figure of £68 million given above represents the *maximum* increase in imports that would be necessary, and that in all probability the actual figure would be considerably less than this.

Let us assume for the moment, however, that the increase in imports is proportional to the increase in production, and let us further assume that we shall have to increase our food imports by the higher figure given above, namely £55 million. This gives us a total of £123 million, which we may take as being the maximum figure by which total imports would have to be increased, and for which corresponding exports would have to be found in payment. Since the total value of our exports in 1934 was £396 million, this means that on the basis

of 1934 prices an increase in exports of approximately 30 per cent would be necessary to pay for the additional imports.

In actual practice the increase in the export of goods would not have to be so large as this, because there would be some increase in our invisible exports as well. For example, the mere fact of the increase in imports would tend to increase the amount this country receives from shipping freights, and also from the various insurance and financial services incidental thereto. Indeed, if there were a proportional increase in the invisible exports, the required increase in visible exports would be only 18 per cent. It is certain, however, that some of the invisible exports would not increase proportionately (although some items, such as shipping, might increase more than in proportion) so that we can only say that on the above assumptions the required increase in exports would lie between 18 per cent and 30 per cent.

Now there can be no doubt about the *capacity* of our export trades to increase their output by 30 per cent. They could, in fact, increase it by far more than that if required. The chronic unemployment and under-production that have characterized our basic export trades since the collapse of the immediate post-war boom are too well known to need emphasis here. Even in 1929 these trades were far from fully occupied, yet the volume of exports in that year was 45 per cent greater than in 1934. An increase of 30 per cent over the 1934 volume is thus clearly within their capacity.

It is one thing, however, to be able to *produce* the goods, but it is quite another thing to be able to *sell* them! Clearly, if British exporters could have sold an increased output in 1934 at a profit, they would have done so; their difficulty was that though they could have produced more goods they could only have sold them at a loss. Foreign producers were in a similar position. If they could have sold more of their goods at a profit in Britain they would have done so; but they were prevented from doing so partly by the import duties and quota regulations that had been imposed, and partly by the fact that the bulk of the British people could not afford to increase their purchases whether of home or foreign produced goods. They

were certainly not restrained by any incapacity to produce more goods, as is shown by the fact that the volume of world trade in 1929 was 27 per cent greater than in 1934.

Furthermore, the types of commodity which it is essential for Britain to import, namely raw materials and foodstuffs, are precisely the types whose producers were hardest hit by the depression, and in which the greatest difficulties had been encountered, and the greatest efforts made, to operate schemes for the restriction of output. These schemes will be examined more fully in a subsequent chapter, but the mere fact of their existence is sufficient to show that the producers of raw materials and foodstuffs would have been only too anxious to increase their exports to this country if we had been willing to purchase them. Furthermore, the reduction in the incomes of the primary producers, as a result of the fall in the value of their products, forced them to restrict their purchases of manufactured goods, with consequent disastrous effects on British export trade. We thus have the absurd position that the primary producing countries could not afford to buy the manufactured goods of British and other industrial producers, while the latter could not purchase primary products because they could not sell their manufactured goods to the former! It is clear that the central problem here was not one of capacity to produce but of exchange. We shall examine in later chapters the reasons for the breakdown in the exchange machinery and the possible solutions thereto; the point that concerns us at the moment is that, provided the exchange problem can be solved, there is no question of the capacity of the primary producers to increase their exports to this country or of the capacity of our export trades to produce the goods necessary to pay for them.

The way in which the willingness and ability of foreign countries to buy our goods is closely bound up with the willingness of this country to buy theirs is clearly shown by the following extracts from the Report of the Joint Committee of Cotton Trade Organizations, which has been particularly concerned at the effect on exports of recent British agricultural policy in restricting the import of foodstuffs from abroad:

The trend of British agricultural policy towards a greater degree of self-sufficiency has a most important bearing on Lancashire's export problems, which is often overlooked. The reduction of foreign foodstuff imports, and the stabilization of imports from the Dominions, have been among the principal aims of British policy since 1932, as may be seen from the trade agreements with Empire countries, and with such foreign countries as Denmark and Argentina. Since neither economic conditions nor monetary policies have encouraged the expansion of overseas lending, and since international trade is becoming more and more subject to a form of control which resembles bilateral barter, any reduction in imports must eventually be followed by a corresponding decline in exports. As the countries which supply 85 per cent of British imports of foodstuffs take more than 60 per cent of our cotton goods exports, Lancashire's prospects are closely connected with the trend of British agricultural policy. So far the effect of British import restrictions has been mainly psychological. The exporting countries concerned have accepted, with varying degrees of reluctance, the limitation of their market in the United Kingdom. It is clear from their attitude in recent negotiations, and from the tone of their Press, that they have been profoundly disturbed by these restrictions, and that some of them are consequently turning towards the development of their own manufacturing industries.¹

And again:

It appears that British commercial policy towards the Dominions and trade agreement countries has been governed to a greater extent by the demands of British agricultural policy than by the interests of the exporting industries.²

The implication of these two quotations is that an increase in British imports of foodstuffs would of itself tend to increase the demand for British exports, and to that extent would be self-financing; and the same argument would clearly apply in the case of increased imports of raw materials. That this is not just wishful-thinking on the part of British exporters was demonstrated by the visit to this country in 1936 of Mr. Walter

¹ *Lancashire and the Future: the Present Position and Prospects of the Cotton Industry*, published by the Joint Committee of Cotton Trade Organizations, p. 12.

² *Ibid.*, p. 14.

Nash, Finance Minister in New Zealand's Labour Government, one of whose objects was to endeavour to arrange an exchange between New Zealand's agricultural products and Britain's industrial products to the mutual advantage of both countries. To quote his own words:

We can best raise the standard of living of our people by exporting the surplus of these [foodstuffs and agricultural raw materials] in exchange for manufactured products. It is essentially because of recognition of this that I am in the United Kingdom at the present time. It is our Government's hope that we shall be able to make arrangements with this country for the interchange of our surplus products to the mutual advantage of the people of both countries and that the threats of restricted production which are so inexcusable in the face of pressing human needs will be avoided.¹

(13) *Conclusions*

We have now examined the increases in output that could have been attained in 1934 with the existing plant and equipment and the existing methods of production, and we have given some examples of the potential increases obtainable by utilizing the most modern plant and processes. The information available is unfortunately far from complete, but even so it would appear safe to conclude that in 1934 the unused productive capacity would certainly have sufficed to achieve our minimum standard and would probably have sufficed to achieve our reasonable standard, except in the case of housing and possibly of clothing. Of these two, the rehousing of a considerable section of the population on an adequate scale must of necessity be a fairly lengthy process, and we have seen that it would take some four years to reach our minimum standard and nearly ten years to reach our reasonable standard. This may perhaps seem a long time, but most housing reformers would be overjoyed to think that the whole population would be properly housed at the end of such a short period as ten years.

¹*Labour Rule in New Zealand*, by Walter Nash. New Fabian Research Bureau Quarterly No. 12.

In the case of clothing an increase of 40 per cent, which is twice the increase needed in any of the other items, is required for the reasonable standard. Direct evidence, as shown by the Board of Trade indices, of actual increases in output is available only in the case of boots and shoes, where the production in the first quarter of 1936 was 17 per cent higher than the average for 1934, but the indirect evidence of the unemployment figures already quoted would appear to indicate that an increase of at least the same amount could have been obtained in the other clothing trades. This, though sufficient to cover the minimum standard, is less than half the increase necessary for the reasonable standard.

Articles of clothing ready for consumption are, however, only the end products of a long line of manufacturing processes, and our investigation has shown that in the textile trades, which manufacture the cloth and dress materials which form the raw material of the clothing trades, the unused productive capacity was more than adequate to cope with an increase of 40 per cent in home consumption; and the same applies to the iron and steel and engineering trades which would be called on to provide any extra plant and machinery that might be required. On the other hand it is more than probable that the required expansion of the clothing trades, i.e. of the trades engaged in making up dress materials into actual articles of clothing, would be less than 40 per cent. This arises from the fact that a good deal of women's clothing is actually made up in the home, particularly among the poorer sections of the community. A considerable part of any increase in clothing expenditure among these sections is thus likely to take the form of increased purchases of dress materials rather than of finished articles of clothing, and as we have already seen, the textile trades are more than capable of supplying this demand. The apparent lack of sufficient surplus capacity in the clothing trades themselves is thus not so serious an obstacle to the adequate clothing of the people as might appear at first sight.

There is reason to suppose, moreover, that the clothing trades could be expanded fairly rapidly if the necessary demand were forthcoming.

An increasingly large proportion of the workers employed in the clothing trades are relatively unskilled, due in the main to the introduction of mechanized processes, and to the division of processes which were formerly performed in their entirety by skilled workers into a large number of relatively simple operations each of which can be performed by an unskilled worker. Thus according to one investigator,

Under modern conditions [i.e. in the modern clothing factory] there are practically no operations that cannot be learnt in two or three months at the outside . . . children are entering at the age of 14 or 15, many of them straight from school, and are being used to displace adult women, who in turn are largely displacing men even in the skilled jobs, formerly their sole preserve.¹

As an example of this he quotes the dress-making and women's light clothing trades, where there were only 4,000 male workers out of a total of 169,000, while of the female workers 27 per cent were under twenty-one.²

The same investigator goes on to say that,

Some idea of the extent to which sub-division of operations is growing may be gained from the fact that in certain London firms there are now as many as 85 different stages in making a jacket, 20 in vests, 25 in trousers. Few young workers can learn more than one process. They stick to this and become proficient as piece-workers.³

This displacement of skilled labour by unskilled, of male by female, and of adult by juvenile labour which, as this investigator shows, is by no means confined to the clothing trades, is creating a grave social problem; since it is leading to a lowering both of the general level of skill and of the average wage paid in the industry. From our present point of view, however, there is at least this hopeful feature, that an extension of productive capacity can be far more rapidly brought about when the work is mainly performed by unskilled workers than when it requires a high proportion of skilled workers whose training

¹ *Youth in British Industry*, by John Gollan, p. 106.

² *Ibid.*, p. 105.

³ *Ibid.*, p. 106.

may take several years. Indeed, such an extension would clearly provide the best solution to the problem, for it would enable the general public to enjoy the benefits of the reduction in costs attainable by the new methods, while at the same time providing continued employment for the skilled workers instead of throwing them on the street.

The lightning speed with which new industries can expand when the requisite demand is forthcoming is illustrated in the case of the motor industry. The output of cars and commercial vehicles increased from 342,000 in 1934 (itself the highest output achieved up to that time) to 508,000 in 1937—an increase of 50 per cent. Employment in the industry between these years increased from 243,000 to 334,000, an increase of 37 per cent.¹ (Unemployment in 1934 was 10 per cent, and in 1937, 5 per cent.) Other examples are the electrical trades and metal industries, in both of which employment in 1933 was at least as high as in 1929, and the first of which showed a further expansion between 1933 and 1937 of over 50 per cent, and the second one of over 40 per cent. These figures, it should be noted, refer to *employment* only, and it is probable that the increase in output was considerably greater.

An even more striking example is shown by the development of the aircraft industry. Between 1934 and 1935 the gross value of its output increased from £9 million to £14 million, an increase of 55 per cent in one year. The number of aeroplanes produced increased by 63 per cent and the number of aeroplane engines by nearly 75 per cent. This shows how rapidly an industry making finished goods can be expanded if required, provided always of course that there is available unemployed labour and unused capacity in the industries making capital goods. Indeed, certain sections of the clothing trades have themselves shown remarkably rapid expansion in recent years. Thus the *Economist*, in two articles entitled "The Clothing of the People,"² has pointed out that "over 373 million pairs of

¹ The employment figures cover all workers employed in the "construction and repair of motor vehicles, cycles and aircraft" and so include some workers outside the motor industry proper; for example, those engaged in aircraft production.

² The *Economist*, August 21st, 1937 and August 28th, 1937.

stockings and hose were sold in 1935, compared with 289 million pairs in 1930, an increase of nearly 30 per cent; while in the case of artificial silk stockings alone the increase was as high as 44 per cent. In the case of knitted underwear the improvement has been equally striking, the number sold having increased by 43 per cent between 1930 and 1934.

The same thing is shown by the figures for the domestic consumption of woollen and cotton cloths. Thus between 1930 and 1933 the domestic consumption of woollen and worsted cloths increased by 25 per cent, while between 1930 and 1935 that of cotton piece-goods increased by 44 per cent and that of silk and artificial silk fabrics and mixtures nearly doubled. It is true, as the *Economist* points out, that "cotton and silk fabrics are used for furnishing as well as for clothes; but the advance made in the latter industry is unmistakable."

The *Economist* goes on to ask:

Will this growth continue: It is difficult to give a certain answer. Probably it will; but the future of the clothing industry depends upon two things, one within, the other outside the industry's own control. If it can continue to combine reasonably good quality and up-to-date design with a diminishing *retail* price it will go on opening up new markets. But it is also dependent on the ability of the public to spend a fairly high proportion of their income upon clothes. . . . A rise in the cost of living which was not accompanied by an equivalent rise in the average level of earnings would, undoubtedly, tend to react unfavourably on the continued progress of the clothing trades.

Now the important thing to notice about this answer is that the two things on which, in the *Economist's* view, the growth of the industry depends are both factors influencing the *demand* for the industry's products. There is apparently no question of the industry's being unable to expand its output to meet an increased demand. The only question is whether that increased demand will be forthcoming, or can be induced by reducing prices.

The above-mentioned two conditions of unused capacity in the heavy industries and unemployed labour were not only amply fulfilled in 1934, as we have already seen, but they were

still fulfilled even in 1937 so far as the Distressed Areas are concerned. These areas, traditionally the centres of heavy industry, still had over 200,000 workers unemployed in that year, in spite of the increase in activity brought about by re-armament and the revival of shipbuilding. We have already seen how great is the probable increase in output that could be achieved by the most up-to-date methods in the coal, iron and steel and textile industries, and it is unlikely in view of this that all the unemployed in these industries will ever again find work at their old trades. The remedy clearly is to find work for them by developing the lighter industries making consumers' goods. In the words of a recent article in the *Statist*:

The main industries which could well be placed in the distressed areas are those of a lighter type, which have developed in recent years in the Midlands and the South, mainly in Greater London. These are industries for which the Metropolitan site is not really economically essential, but which keep away from the distressed areas because of the very fact that they are distressed.¹

A similar view was expressed in an article in the *Economist* describing the Team Valley Trading Estate near Gateshead:

The object of the estate is to rebalance the top-heavy industrial life of Tyneside by planting a variety of light industries. There is an adjacent and newly prosperous market of over 2½ million people in the North-East. But the goods of the sausage, glass, furniture, clothing, and confectionery enterprises in the Team Valley will ultimately be distributed over the national market.

The demand of these industries for unskilled labour, largely female and juvenile, does not compete with the revived needs of the export and armament trades. There is an untapped pool of female labour on Tyneside where only 13·8 per cent of the insured workers are women against a national average of 27·8 per cent; and many males have unhappily been unable to acquire skill during the depression years. Thus the inducements offered to light industries in Gateshead are considerable and typical of the trading estate method.²

This particular estate planned to employ 8,000 workers by the end of 1937, increasing to 40,000 at the end of twenty

¹ Article on "The Plight of the Distressed Areas." The *Statist*, November 14th, 1936.

² "What is a Trading Estate?" The *Economist*, May 29th, 1937.

years. As the article goes on to point out, "8,000 employees (largely women) would compare but slightly with $1\frac{1}{2}$ million insured workers and 148,741 unemployed (over 90 per cent men) in the N.E. area. The 40,000 workers of the ultimate plan may compare little better with the unemployed of the next recession." There is clearly ample room in the Distressed Areas for expansion of the light industries catering directly for the consumer, so far as the supply of labour is concerned.

In Lancashire, which, though not officially scheduled as a Distressed Area, has practically as high a rate of unemployment, some disused cotton mills have been turned into factories for the production of finished consumers' goods, as is evidenced by the following extract from the Chamber of Commerce Journal for April 1937:

The movement to establish new industries in mills formerly used by the cotton industry is making steady progress in Lancashire. The mass production of kitchen furniture is to begin shortly in a mill at Heywood, closed since 1929. Another empty cotton mill at Heywood has been acquired for the purpose of establishing a new industry by an Oldham firm of raincoat and waterproof garment manufacturers. A cotton mill at Oldham, which was closed two years ago, has been taken by a Birmingham firm and will be converted for the manufacture of bedding.

In view of the large number of derelict mills still standing in Lancashire, there would appear to be room for a considerable extension of this movement, which would help to provide just those goods which are most necessary for the all-round achievement of our reasonable standard. Unfortunately, such a movement is at present hampered by the existence of surplus capacity and unemployed workers in the light industries themselves, as is illustrated by the following quotation from the *Manchester Guardian* for March 20th, 1937:

It is expected that the National Federation of Boot and Shoe Manufacturers and the National Union of Boot and Shoe Operatives will unite in sending a deputation to the Minister of Labour to oppose the proposal made in the Special Areas Bill to establish boot and shoe factories in South Wales.

Unemployment in the industry is between 12 and 14 per cent and

it is felt that the opening of factories in new areas will only result in more operatives being thrown out of work in the recognized centres of the industry.

It is difficult to criticize this attitude so long as existing plant and workers are available and unemployed, for it is justified so long as the paradox of poverty and plenty is allowed to continue; but once the existing workers and plant are fully employed the basis of the opposition disappears and there would then be no further objection to the setting up of these industries in the Distressed Areas.

(14) *The Dependence of Trade Recovery on Rearmament*

Our investigation of the extent to which output could have been increased in 1934 with the existing equipment and methods has been based partly on the actual increase that in fact occurred between 1934 and 1937. This period is sufficiently short to enable us in most industries to ignore any extension of productive *capacity* made between those two years and to assume without serious loss of accuracy that the actual output in 1937 could have been produced with the plant available in 1934. This method of procedure, however, naturally gives rise to the criticism that we have demonstrated what can be produced by showing what *has* been produced, and since *ipso facto* the unused productive capacity is now being used, what are we worrying about?

To this criticism it may be answered that the actual increase in production since 1934 is not the only evidence that has been adduced of unused capacity available in that year; nor in the case of the industries producing consumers' goods, such as the textile trades, was it even the chief evidence. Indeed, in the case of the latter industries the method could not be used, because production indices are not available for most of the clothing trades, while in the other trades the increase in production between these two years was relatively small. As we have already seen, the striking feature about the increase in production between these two years was that it was to a very large extent due to the industries making capital goods.

Nevertheless, it must be admitted that there is some force in this criticism, particularly as we have argued that one of the main essentials in expanding the production of consumption goods is the existence of unused capacity in the industries making capital goods. It therefore behoves us to examine how far the increase in the capital goods industries was due to the increased demand for equipment from the consumers' goods industries, and how far it was due to special factors, such as rearmament.

Unfortunately, information on this subject is very scanty. For one thing, the effect of the rearmament programme is not confined to the actual orders for armaments. The firms receiving these orders will in many cases have to expand their equipment and so will give orders for machinery and raw materials to other firms which are not specifically manufacturing armaments. These other firms in turn will probably expand their equipment to deal with the increase in orders they are receiving, and so the process will go on. Nor is it confined to orders of this type. The workers employed on rearmament will possess an increased purchasing power which will mean an increased demand for consumption goods. The industries making these goods will in turn be encouraged to extend their capital equipment, and in this way a cumulative process of expansion will be set up. The nature of the process will be examined in more detail when we come to consider the nature and workings of the economic system; all we are concerned with at this stage is the fact that the total effects of rearmament spread far beyond the actual armament orders themselves. The problem of elucidating their effect would thus be an extremely difficult and intricate one, even if full statistical information were available. In the absence of the latter only a very broad estimate is possible.

The only industry for which a direct estimate of the effect of rearmament is available is the steel industry. The *Economist* of October 2nd, 1937, stated that:

An official survey shows that about 20 per cent of the current output of finished steel is absorbed in the manufacture of arma-

ments, such as warships, guns and munitions, and equipment, such as aeroplane hangars, dockyard cranes and shadow factories.

The *Financial Times* of December 16th, 1937, after quoting the same estimate, goes on to say that:

If allowance is made for a number of works indirectly connected with rearmament, the share may well be put at one-quarter of total output. In previous years armaments absorbed only a relatively insignificant part of steel production.

The 1937 output of finished steel produced was about 9,600,000 tons, of which "25 per cent can be eliminated for the fulfilment of the defence programme." After knocking off this 25 per cent, we are left with 7,200,000 tons as the amount available for ordinary industrial consumption. The total production in 1934 was 6,400,000 tons, so that the expansion in output apart from that needed for the defence programme was only 800,000 tons, or $12\frac{1}{2}$ per cent out of a total expansion of 50 per cent. Actually, this calculation rather overstates the case, because it assumes that none of the 1934 output was spent on armaments, whereas some part of the output must have been used for that purpose, even if it was, in the words of the *Financial Times*, "relatively insignificant." On the other hand, however, the *Financial Times*'s allowance for indirect expenditure on armaments would appear to be on the low side. Taking it all in all, we shall probably not be far out if we assume that three-quarters of the increase between 1934 and 1937 was due to rearmament.¹

Similar estimates for other industries are unfortunately not available, but the effect of rearmament on the other capital goods industries, if not quite so large as in the case of steel, must have been very considerable. The other two groups for which the Board of Trade index showed large increases were non-ferrous metals and engineering and shipbuilding. With regard to the former, we have it on the authority of the *Statist*

¹ This is confirmed by the estimate of Mr. E. D. McCallum, arrived at by quite a different method, that out of the 4,000,000 ton increase in steel ingots and castings between 1934 and 1937, 3,000,000 was due to rearmament. (See p. 96.)

that "The big and urgent need for armaments has created an exceptional market for iron, steel and the non-ferrous metals, especially aluminium alloys."¹ So far as engineering is concerned it is a matter of common knowledge that engineering firms throughout the country, and particularly those making machine-tools, experienced a phenomenal increase in orders and subsequently in profits, a large part of which, except perhaps in the case of the electrical branch of the industry, was due to rearmament work.

It is clear that rearmament has been directly responsible for a considerable part of the increase in output in those branches of industry which show the greatest increases as compared with 1934; and if account were taken of the indirect effects such as the increased demand for consumption goods by the workers thereby employed the responsibility would be even greater. It is of course not claimed that the whole of the trade recovery that has been experienced since 1932 is due to rearmament; such a claim would be fantastic if only for the reason that rearmament expenditure on the present vast scale did not really begin until 1936. There were many influences contributing to that recovery, such as the abandonment of the gold standard and the introduction of a general tariff, the reduction in interest rates as a result of the "cheap money" policy, and the consequent housing boom, to mention only some of the more important. By 1936, however, these influences were beginning to exhaust themselves and the shadow of a set-back, or at the least of a slowing down, in trade recovery began to loom on the horizon. Thus the *Economist* at the beginning of 1936 summarized the year's prospects as follows:

We may predict with reasonable confidence that, while "recovery" will spread over a wider and wider range of consumers' trades and industries, the pace of recovery in the "capital goods" industries will slow down. After all, one cannot expect this country to pile up capital equipment *ad infinitum* at the 1933-5 rate. There may still be some leeway to make up, but there are limits to capital extension inside the country, as long as world trade remains at a low ebb. All the indications at present are that "recovery" in

¹ The *Statist*, November 7th, 1936.

this country is likely to become wider in extent but slower in momentum during 1936.¹

The significance of this forecast lay in the fact that, as we shall see more clearly in a later chapter, the state of activity in the capital goods industries sets the tone for industry as a whole. The consumption goods industries may go on expanding for a short while after the capital goods industries have started to slow down, but it cannot be very long before they too are affected by the reduction in purchasing power thereby occasioned. The possibility of the capital goods industries coming to the end of their tether was thus very serious. On top of the waning forces of recovery, however, was imposed the rearmament expenditure which not only reinforced them and maintained output at its previous level, but actually carried production to still higher levels.

It has now become clear, however, that even the rearmament programme, in spite of its unprecedented scale, was not sufficient to sustain the record level of activity that had been reached. During the first half of 1937 it looked as though a recovery in the export trades, due to the increase in the purchasing power of the primary producing countries resulting from the rapid rise in raw material prices (itself partly due to the world armaments race), might supplement the effects of rearmament and carry productive activity still further; but this hope proved shortlived, and in 1938 trade activity was definitely below the 1937 level.

This brings us to the final reply that may be made to the criticism that we have only demonstrated what could have been produced by showing what has in fact been produced. We have shown that a considerable part of the increase in production must be ascribed to the effects of the rearmament programme, and that without this stimulant it is almost certain that a trade depression would have already occurred. This leads to the conclusion, amply confirmed by past experience, that even if full production can be attained, it cannot be maintained for any length of time. Production, in fact, as our

¹ The *Economist*, January 11th, 1936.

economic affairs are at present organized, does not progress smoothly and continuously, but follows a definite cyclical trend. Clearly, then, we must not judge the average amount of unused productive capacity by the amount existing at the top of the boom, any more than we must judge it by the amount existing at the bottom of the slump. We must judge it by the amount existing at a point approximately half-way between the two, and if we could assume full employment at the top of the boom we could *measure* this amount by the actual increase in production between the half-way year and the peak year (on the assumption once again that no significant change in methods of production occurs between the two years.)

Now we have already seen that the year chosen for our investigation, 1934, does lie approximately half-way between the boom and the slump years. The Board of Trade's index of production shows an increase of 21 per cent between 1932 and 1934, as compared with the increase between 1934 and 1937 of 25 per cent. Thus even if we ignore altogether the special effects of rearmament, we are still justified in using the actual increases in output between 1934 and 1937 in estimating not only the unused productive capacity available in 1934, but also the average unused capacity available over the whole period from the bottom of the slump to the top of the boom.

CHAPTER VIII

WHAT IS WRONG WITH OUR ECONOMIC SYSTEM?

WE have now arrived at the point at which, having marshalled the facts, we have to endeavour to explain them. In previous chapters we have discovered that a large section of our population is woefully lacking in the necessities and amenities of life on any standard that to-day can be considered reasonable, we have investigated the question of our productive capacity, and we have reached the conclusion that, although our potential productivity is not nearly so great as some of our more enthusiastic monetary reformers would have us believe, yet it was sufficient in 1934 certainly to have achieved our minimum standard and probably to have achieved our reasonable standard within a fairly short space of time, if only our resources had been directed towards that end. In the next chapter we shall examine some of the measures that have been taken either directly by the Government or under its auspices to bridge the gap between actual and potential productivity and we shall find that the great majority of these measures have been directed not to utilizing the resources available in order to raise the general standard of living, but to the restriction and in some cases the actual destruction of "excess" capacity, in order to maintain or increase the profitability of the productive resources still being exploited. Monopolies and monopolistic arrangements have been set up whose objective it would seem has been profits for the few rather than plenty for the many.

Is this due to the selfish greed and successful lobbying of a few vested interests, or is it inherent in the nature of our existing economic arrangements? This is the crucial question we now have to answer. If it is due to the former, then a campaign to educate the public as to the true state of affairs and to expose the interests concerned is all that is required.

The appropriate steps could then be taken, without any undue disturbance to our existing economy. If the latter, then a much more radical solution is required, which will profoundly affect the whole of our economic life. In fact, to put the matter briefly, we have to decide whether in the final analysis the appropriate solution is social reform or socialism.

This question clearly cannot be decided without a much deeper investigation into the nature of our present economic arrangements than we have so far undertaken. Up to the present we have been concerned with effects rather than causes, with description rather than analysis. We must now try to reach an understanding of the nature of the basic forces which determine our economic life—for without such an understanding our description will remain but a series of isolated and unrelated facts.

The obvious first step in trying to reach such an understanding is to see what the professional economists have to say about it, and in particular to examine their explanations of the poverty-in-plenty paradox. As soon as one attempts this task, however, one realizes that there is no agreement on the question among the economists themselves; in fact there are almost as many different views as there are economists! There is admittedly pretty general agreement on a considerable body of economic doctrine concerned with the analysis of the conditions of equilibrium in an ideal world of perfect competition from which "economic friction" is completely absent, and in which all productive resources are assumed to be fully employed. When, however, we pass from this ideal world to the real world in which the dominant feature is not perfect competition but monopolies and restrictive devices of every kind, and in which the major problem is the unemployment of productive resources coexistent with widespread poverty, then the agreement among the economists comes to an abrupt end. In view of the fact that the agreed body of doctrine assumes the *absence* of the very phenomena we are trying to explain, namely, the widespread unemployment of productive resources coupled with the increasing use of restrictive devices and schemes of destruction, it is perhaps

not surprising that there should be no agreement as to their cause. There is indeed one school of economists which treats them as cause and effect, and seeks its explanation of coexistent poverty and unemployment in the departure of economic life from the conditions of perfect competition.

Now there is no doubt that these two things are correlated. The heyday of capitalist expansion (although not of the conditions of life of the workers) was most certainly the period when State interference was at a minimum and the assumptions of orthodox economic analysis were most nearly realized; while the aggravation of the economic problem has undoubtedly been accompanied by an increasing divergence of real life from these assumptions. Nevertheless we cannot assume that the one is the *cause* of the other. They may both be the effects of a third, underlying set of forces. Indeed, the actual history of the restriction and destruction schemes of recent years, particularly since 1931,¹ supports the view that they were adopted as a means of solving an economic problem which had already arisen. In other words, they were an effect rather than a cause of the economic crisis.

To this the reply would probably be made that this is true enough, but nevertheless the crisis itself was due to earlier departures from economic orthodoxy. Monopoly and restriction are like drugs; they act first as a stimulant, but the dose has continually to be increased to produce the desired effect, and they end by killing the patient. This reply, however, still leaves unanswered the question as to why a resort to drugs was necessary in the first place. If free economic competition produced full employment, a rising standard of living and the maximum satisfaction of everybody concerned, why did any departure from these conditions take place? An economic system, like an individual, does not resort to drugs unless there is some deep underlying *malaise*.

It is clear that even if we accept the view that our present ills are due to interferences of one sort and another with free competition (a view which as we have already pointed out is open to considerable question) we must go further and examine

¹ The more important of these are examined in detail in the next chapter.

the question as to why these interferences have occurred. It is equally clear that we cannot examine all the different explanations that have been put forward by different economists to account for our present economic discontents; this would require a book in itself. We shall therefore content ourselves with examining the views of the most famous, and probably the most brilliant, of the professional economists, namely Mr. J. M. Keynes, as expressed in his recent book *The General Theory of Employment, Interest and Money*.¹ The choice of Mr. Keynes is justified on the ground that he is one of the few British economists who have attempted to build up a general theory applicable to the conditions of the real world in which we live, and not to some hypothetical world in which the problems with which we are concerned are assumed not to exist. In the book just mentioned he is concerned to analyse the conditions which determine the volume of employment at any given time, and in particular to determine the conditions under which full employment is possible. His analysis is thus particularly germane to our present inquiry.

Mr. Keynes begins by pointing out that orthodox economic theory is really only a special case of a far more general theory, and that the postulates on which it is based are not those applicable to the real world; which accounts for the extraordinarily unreal, and sometimes positively harmful, quality of the advice given by professional economists on current problems. These postulates are of such a nature that on their basis involuntary unemployment cannot occur, which makes them peculiarly inept for explaining a world in which involuntary unemployment on a vast scale is the most pressing problem of the day. Mr. Keynes therefore rejects them and proceeds to build up his theory on the basis that involuntary unemployment can occur, and in fact is most likely to occur unless certain special conditions are fulfilled. Indeed the main object of his book is the investigation of those conditions under which alone full employment is possible.

¹ For a brilliant exposition and critique of the views of other economists, notably of those of Professors Robbins and Hayek, the reader is referred to John Strachey's *The Nature of Capitalist Crisis*.

Mr. Keynes starts off with the very simple proposition that an increase in the national income will be accompanied by an increase in consumption, but not to the full extent of the increase in income. In other words part of the increase will be saved. Let us suppose that there are unemployed productive resources available, including unemployed labour; and that for some reason or other an increase in employment takes place,¹ wages and other costs remaining unaltered. This will involve an increase in the total money incomes of the community, part of which will be spent on increased consumption and part of which will be saved. It is clear that there will be an increased demand for consumers' goods but not to the full extent of the increase in incomes. Employers, therefore, must not put the whole of the new productive resources they are employing to the making of consumers' goods, because if they do they will find that when the new goods come on the market the increase in demand will not be sufficient to absorb them at current prices, and part will consequently have to be sold at a loss. The new production of consumers' goods must correspond, in fact, not to the whole increase in money incomes that has taken place, but only to that part which is actually spent on such goods.

Since only part of the newly employed labour must be engaged on the production of consumption goods, what is to happen to the rest? It must clearly be employed in making investment goods of one sort and another (new machinery, goods for replenishing stocks and so on). Further, if the production of these goods is to be profitable to the employers, there must be an increase in the demand for this type of goods sufficient to absorb the new production. In other words, there must be an increase in the demand for new investment goods equal to that part of the new money incomes which is not spent on consumption but is saved.

Let us endeavour to make this clearer by restating it in another way. The new incomes which are disbursed as a result

¹ How resources come to be unemployed, and the conditions under which an increase in their employment is likely to occur, will be discussed at a later stage.

of the increase in employment are, from the employer's point of view, costs of production. He hopes to recover these costs (plus a profit for himself) when he sells the new goods that are being produced. If he did not think he could do this he would not have embarked on the new production. Therefore, *all* the new money incomes that are disbursed must be returned to employers in the form of payments for the new goods if their production is to be profitable; but since only part will be returned in the form of payment for new consumption goods, the rest must be returned as payment for new investment goods.

If the increase in the demand for new investment goods¹ turns out to be less than the difference between the new money incomes and that part of them which is spent on consumption goods, then the whole of the new incomes will not be returned to employers, and consequently their receipts will not cover their costs plus their expected profit. Their profits on the new production will thus be less than they anticipated and they will consequently contract their scale of operations and with it the amount of employment they are willing to give. If, however, the increase in the demand for new investment goods turns out to be greater than this difference, the employers' profits will be greater than they anticipated and they will consequently expand their scale of employment. Equilibrium will be reached, and the volume of employment remain stable, at that point at which the demand for new investment goods is just equal to the difference between total money incomes and that part which is spent on consumption goods.

This point need not, however, be the point at which full employment occurs; it all depends on the demand for new investment goods. The stronger this is the smaller will be the volume of unemployment, and vice versa. Unfortunately, says Mr. Keynes, there is reason to believe that, unless special measures are taken, the volume of new investment will increasingly fall short of that necessary to maintain full employment. The reason is as follows:

¹ Including consumption goods which are not actually sold to consumers but are used to replenish stocks.

The more highly developed industrially a country becomes, and the greater the amount of income per head of the population, the greater is the amount of income that is likely to be saved, and the greater, therefore, the volume of new investment that is necessary to maintain full employment. Unfortunately, however, the more highly industrialized a country is the more difficult does it also become to find profitable outlets for new investment. New capital is naturally employed first in the most profitable channels, and as these are filled it is forced to flow into channels which become progressively less profitable. It follows that the inducement to invest, and hence the demand for new investment goods, tends to fall off as the total stock of capital goods (and also the total income) of a country increases. In other words, new investment declines just when it is most important, from the point of view of maintaining full employment, that it should increase; and we find ourselves faced with the absurd paradox of unemployed capital resources and unemployed labour, simply because profitable new investments on a sufficient scale are not forthcoming.

For it must not be forgotten that profit is the essential condition of production in a capitalist society. Goods will not be produced, however great the human need for them may be, unless their production is profitable to the industrialists undertaking it. Indeed, goods and machinery will be actually destroyed in order to increase the profitability of the remainder, in spite of the fact that millions are in need of the goods that are destroyed. Orthodox economic theory is based on the assumption that the spur of profit will maximize output, but Mr. Keynes has conclusively shown that this assumption is unjustified, as has indeed been abundantly clear from the actual facts ever since the war.

The difficulty of increasing the demand for investment goods sufficiently to maintain full employment is aggravated by the fact that new investment is itself to a large extent bound up with Stock Exchange speculation. Mr. Keynes points out that the object of the most skilled investment nowadays has become, not the maximum development of the nation's resources, but, to quote his own words, " 'to beat' the gun, as the Americans

so well express it, to outwit the crowd, and to pass the bad, or depreciating half-crown to the other fellow.”¹ He rightly concludes from this that “When the capital development of a country becomes the by-product of the activities of a casino, the job is likely to be ill-done.”²

Since the key-point of Mr. Keynes’ analysis is to be found in the difficulty in maintaining an adequate demand for new investment goods because of the tendency for the profitability of new investment to fall, it will be as well to examine this question a little more closely, before going on to see what remedies Mr. Keynes proposes.

When a manufacturer is making up his mind whether or not to install new capital equipment, he compares the cost of the new equipment with the increases in his receipts which will be obtained as a result of it. The total of the expected increases during the life of the new equipment will of course exceed the initial cost; in other words, the investment in the new equipment can be considered as giving a yearly net return comparable to the dividends obtainable from an investment in Stock Exchange securities. This net return Mr. Keynes calls the “marginal efficiency” of the equipment in question.³ Broadly it corresponds to what the manufacturer would term the net rate of profit to be expected on the new capital; although accounting practice varies so much in determining what deductions from gross profit are appropriate in order to obtain the net profit, that in any particular case the net rate of profit as estimated by the manufacturer might differ considerably from that calculated on Mr. Keynes’ definitions. Nevertheless we may say that the concept of marginal efficiency is an attempt to translate this idea of an expected rate of profit that the manufacturer has in mind into a more precise form.

When the manufacturer has decided on the rate of profit to be expected from his new capital equipment he has then to

¹ *The General Theory of Employment, Interest and Money*, p. 155.

² *Op. cit.*, p. 159.

³ The precise definition of the marginal efficiency of a capital asset is that it is that rate of discount which would make the present value of the expected receipts equal to the current cost of production (i.e. the replacement cost) of the asset.

compare this with the rate of interest which he must pay in order to borrow the money necessary to finance its installation. If the marginal efficiency of the new equipment (alias net rate of profit) is greater than the interest he has to pay, clearly it is worth his while to borrow the money and go straight ahead.¹ Even if the manufacturer has enough money to finance the new purchases himself, the same kind of comparison will still be appropriate. In this case he will compare the marginal efficiency of the new capital with the interest he would obtain by lending his money to someone else; but it will still be the relation between the marginal efficiency and the rate of interest that will be the deciding factor.

What applies to the individual business man applies also to business men in general. So long as there is any type of capital extension that will give a return (after allowing for the risk involved) higher than the prevailing long-term rate of interest, it is probable that some business men will be found willing to undertake that extension. At any particular moment the marginal efficiencies of the different types of capital extension that are possible will vary considerably. Obviously those types will be undertaken first whose marginal efficiency is greatest, since by definition these are the ones which are expected to be most profitable. If we call the greatest return that can be obtained at any particular moment the "marginal efficiency of capital in general," we can say that new investment will be expanded up to that point at which the marginal efficiency of capital in general becomes equal to the current long-term rate of interest. For so long as there remains some new capital extension whose marginal efficiency is greater than the current rate of interest, it will pay some manufacturer to borrow the money necessary to finance it.

We have already seen that the important factor in determining the volume of employment at any time is the demand for new investment goods. We can now see that this demand in turn is determined by the relationship between the marginal efficiency of capital in general and the current rate of interest.

¹ The risk factor has already been allowed for in estimating the expected increase in receipts resulting from the installation of the new equipment.

If the number of new capital extensions¹ whose marginal efficiency is greater than the current rate of interest is sufficient to maintain full employment, well and good; if not, then the volume of employment will be limited to that which is necessary to produce those new investment goods whose marginal efficiency does exceed the current rate of interest, together with the currently required consumption goods.

We have also seen that the marginal efficiency of capital is a relationship between two quantities; the cost of production of the new capital, and the expected income obtainable from it. As each of these quantities can alter independently, it follows that very sudden and sharp changes can take place in the marginal efficiency of capital in general, and consequently in the volume of new investment and employment, *unless* the rate of interest changes correspondingly. In practice, however, this is unlikely to occur, as the rate of interest (especially the long-term rate) is fairly "sticky" and changes in it tend to be slow and gradual. This leads Mr. Keynes to the conclusion that the only solution is for the State to fill the gap between the new investment which private enterprise is willing to undertake and that necessary to maintain full employment, by itself undertaking new investment based, not on a comparison of marginal efficiency and the rate of interest, but on a more general consideration of social advantage.

Mr. Keynes deals at considerable length with changes in what he calls "the state of long-term expectation," i.e. the view that business men take of the events influencing the prospective yields they *expect* to get from new investments in different types of capital assets. They have to forecast the future state of demand and their state of long-term expectation is a question not only of the most probable forecast, but also of the confidence with which it is made. Mr. Keynes stresses the importance of this factor of the state of confidence in determining the marginal efficiency of capital, and hence the volume of new

¹ Including extensions of liquid capital (i.e. holdings of stocks) as well as fixed capital (i.e. new machinery etc.). For the former the appropriate comparison is probably with the short-term rate of interest. The term "rate of interest", instead of the more accurate "complex of rates of interest", is used for convenience of exposition.

investment. If business men are optimistic (whether their optimism is well-grounded or not) and prospects appear rosy, then the marginal efficiency of capital is raised, and new investment (and consequently employment) is stimulated. If they are pessimistic, then the marginal efficiency of capital is lowered, and investment is retarded. There is thus an inherent instability in the volume of new investment, and hence of employment, which becomes greater the more markets become organized and the more business men consequently become subject to mass psychology.

This instability has become greatly accentuated by the growth of organized stock exchanges. In the early days of capitalism, when a manufacturer sunk his capital and that of a few friends or relations in building up his own business, an investment once made was made for good, and the only thing to do was to make the best job one could of it, hoping that in the long run profits would outweigh losses. With the development of the stock exchange, however, and the consequent divorce of ownership and management, an investor can revalue his investment practically continuously and decide whether to retain it or to sell it. (It is, of course, true that investors as a whole cannot all sell at once, for, if they did, there would be no buyers and the bottom would fall out of the market without a single share changing hands. Something approaching this situation does actually occur in times of crisis.) These revaluations and exchanges are concerned with existing investments, but, nevertheless, they affect new investment, because there is no point in undertaking a new enterprise if a similar existing enterprise can be bought at a smaller cost. Conversely, an extravagant new enterprise will be undertaken in spite of its cost if the promoters think they can sell it to the investing public at an immediate profit. Thus the prices of existing securities determine the cost of financing new enterprises, while the test of the profitability of a new enterprise need no longer be a comparison of costs with prospective returns, but is the profit to be made out of a new issue flotation; i.e. the price the public can be bamboozled into paying for it. Of course, not all new issues are of this character, but there is a sufficient

number, particularly in times of boom, to make an appreciable difference to the volume of new investment.

There is one other result of the existence of organized stock markets, and that is that investors become concerned, not with the real prospective yield of an investment over the whole of its life, but with its *price* over the next few weeks or months. Investment for income gives way to speculation for capital appreciation, and calculation of prospective yields to estimation of the course of market values. This applies even to the "genuine" investor, because he will not be willing to pay 100 for an investment which he believes to be worth 110, if he thinks he can get it for 90 in a week or two. Hence Mr. Keynes' caustic remarks, already quoted, about the object of most skilled investment being to "beat the gun," etc. Investors are concerned, not with real values, but with market values. To quote Mr. Keynes once more:

Professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preference of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds the prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view. It is not a case of choosing those which, to the best of one's judgment, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligence to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practise the fourth, fifth and higher degrees.¹

So impressed is Mr. Keynes with the instability introduced by making new investment the "by-product of a casino" that he seriously considers the possibility of making "the purchase of an investment permanent and indissoluble, like marriage," in order to force the investor to consider long-term prospects only, and not market values. He concludes, however, that at least

¹ Op. cit., p. 156.

so long as an individual has the alternative of hoarding or lending *money*, the effect would be such a drastic reduction of new investment as to make the remedy worse than the disease. Hence capitalism finds itself faced with another, and apparently insoluble, contradiction.

Capital assets give an income which, when totalled, is in excess of their original cost not because they are productive, but because they are *scarce*. If the rate of interest fell to zero, the total of the expected income payments from a capital asset would just equal its cost, but its *physical* productivity would be unaltered. As capital assets become less scarce, so the return on them (their marginal efficiency) falls. It is therefore necessary to keep them sufficiently scarce so that their marginal efficiency is equal to the market rate of interest.

Since the marginal efficiency of capital is due to its scarcity, and not to its productivity, Mr. Keynes goes so far as to say that he "sympathize(s), therefore, with the pre-classical doctrine that everything is *produced* by *labour* aided by what used to be called art and is now called technique, by natural resources which are free or cost a rent according to their scarcity or abundance, and by the results of past labour, embodied in assets, which also command a price according to their scarcity or abundance. It is preferable to regard labour, including, of course, the personal services of the entrepreneur and his assistants, as the sole factor of production, operating in a given environment of technique, natural resources, capital equipment and effective demand."¹

It only remains to add that, in Mr. Keynes' view, in highly industrialized countries like Britain and the U.S.A., provided full employment were maintained, the marginal efficiency of capital could be reduced to zero within a generation.

The Rate of Interest

The important part played by the rate of interest has already been indicated in dealing with the marginal efficiency of capital, and we must now consider this aspect in greater detail.

¹ Op. cit., pp. 213-14. (This seems to be getting perilously near to Karl Marx's Labour Theory of Value!).

There is one consideration of considerable importance which applies to all types of borrowing, though in varying degree. The business-man in embarking his capital in a new enterprise has to take the risk of loss if the enterprise is unsuccessful, but, against this, he has the chance of making very large gains if it is successful. If the capital for the new enterprise is borrowed, however, the lender has no prospect of large gains in the event of success to offset the possibility of loss in the event of failure. Furthermore, he is running a double risk, the risk of the new venture not succeeding and the risk of the borrower deliberately swindling him, i.e. there is a moral hazard, in addition to the commercial one, which is not present in the case of a business man investing his own capital in his own business. The interest payable to the lender must be sufficient to cover these extra "costs," which means that there is a minimum below which the rate of interest cannot fall, however great the volume of funds available, since lenders would prefer to hoard their money, rather than lend it at a rate below this minimum.

This leads Mr. Keynes on to the view that "interest" is a reward, not for saving, but for "not-hoarding." People wish to keep part of their incomes "liquid," i.e. in the form of cash, and they balance the advantages of liquidity against the interest to be obtained from lending, i.e. from "illiquidity." The amount of money people hold is a function partly of their total income and partly of the rate of interest, and this function Mr. Keynes calls the "liquidity-preference" function. The real choice, he says, is not between saving and spending, but between hoarding and lending, and the determinant of this choice is the rate of interest. It is in this way that money enters the scheme of things; for the rate of interest is the factor which equalizes the available quantity of money with the amount people wish to hold. The lower the rate of interest, the greater is the amount they will keep liquid. If an injection of new money is made into the system, the rate of interest will fall to that point at which the increased liquidity-preference is just sufficient to absorb the new money. The fall in the rate of interest will stimulate new investment, and hence increase incomes. Thus, the demand for cash will be increased directly

by the fall in the interest rate, and indirectly by the increase in total incomes. This process will go on to the point at which the increased demand for cash just absorbs the increased supply.

The effect of an expansion of credit is thus to stimulate new investment and hence to increase the volume of employment. The traditional view is that it will cause prices to rise, but Mr. Keynes argues that, *provided* that wages are not increased, this is only certain to happen when full employment is reached. Since in practice, however, full employment in certain lines of production is likely to occur while there is still considerable unemployment in other lines, some rise in prices will probably take place before full employment all round is reached. We can thus distinguish three stages in a credit-expansion. At first, provided there are unemployed resources available in all lines of production, the effect of an increase in credit will be to increase production and employment without any necessary increase in prices. In the second stage the effect will be to increase prices in those lines of production where productive resources are already fully employed, while continuing to increase production where unemployed resources are still available. It is at this stage that "bottlenecks" begin to appear, where production is held up because of the shortage of skilled labour at certain key-points. In this stage credit expansion is partly beneficial and partly inflationary. If the expansion continues this stage gradually merges into the third stage in which, full employment all round having been achieved, the effect is simply to force up prices, and we get the pure inflation of classical economic theory.

Summary of Mr. Keynes' Analysis

It may be as well to pause at this point and try to summarize the salient features of Mr. Keynes' analysis as briefly described in the preceding pages. (It will of course be realized that the account we have given is only a broad outline which of necessity omits all that subtle elaboration with which Mr. Keynes himself embroiders the main theme.)

1. An increase in incomes will be accompanied by an increase

in consumption, but not to the full extent of the increase in incomes.

2. For an increase in employment to be justified (in the eyes of employers) there must be an increased demand for investment goods equal to the difference between the increase in the value of total output and the increase in that of consumption goods. The volume of employment will settle down at the point at which the demand for new investment goods is equal to the difference between the value of total output and the value of goods consumed.

[For those who prefer algebra we may express this as follows:

If P_1 = the value of total output

C_1 = the value of the output of consumption goods

I_1 = the value of the output of investment goods before the increase in employment takes place; while

P_2, C_2, I_2 are the corresponding values afterwards, then the conditions of equilibrium are that:

$$P_1 = C_1 + I_1$$

$$\text{and } P_2 = C_2 + I_2$$

from which it follows that

$$P_2 - P_1 = (C_2 - C_1) + (I_2 - I_1)$$

$$\text{or } I_2 - I_1 = (P_2 - P_1) - (C_2 - C_1)$$

]

3. The demand for investment goods depends on the relation between the marginal efficiency of capital and the market rate of interest. The volume of new investment will be expanded until the marginal efficiency of capital has fallen to the level of the current rate of interest.

4. The market rate of interest is the factor which equalizes the quantity of money and the desire of people to hold wealth in the form of cash, i.e. it determines the division of wealth into liquid and illiquid forms.

5. Capital assets yield a profit not because they are productive, but because they are scarce. From this it follows that as their scarcity diminishes, i.e. as wealth per head increases, their profitability declines also so that new investment becomes increasingly difficult. At the same time, the amount of income that is "saved" (i.e. not spent on consumption) tends to

increase, and with it the volume of new investment necessary to maintain full employment. New investment thus tends to decline just when it is most essential that it should increase. The result is involuntary unemployment of labour and capital resources, *unless* the rate of interest declines sufficiently to offset the fall in the marginal efficiency of capital. There is no reason to expect such an adjustment to take place automatically; on the contrary, there are cogent reasons (and actual experience confirms this) why it should not. This, then, is Mr. Keynes' explanation of the paradox of poverty in the midst of potential plenty. Production is carried on for profit, and profit is dependent on scarcity. As society's powers of production increase, in other words as scarcity tends to disappear, it naturally follows that production becomes more difficult. It does not become *technically* more difficult—on the contrary—but it does become *economically* more difficult, because it becomes less profitable. When this happens, business men practise "ca-canny." They slow down new production until, by the creation of an artificial scarcity, the production they do undertake becomes profitable. A potentially wealthy community is compelled, in Mr. Keynes' words, "to reduce its actual output, until, in spite of its potential wealth, it has become so poor that its surplus over its consumption is sufficiently diminished to correspond to the weakness of the inducement to invest."¹

Not only does Mr. Keynes' analysis explain why we remain poor in spite of our potential wealth, it also explains the steps that have been taken both by governments and by business men to solve the problem. Those steps, as we shall see in detail in the next chapter, have been directed in the main not to getting rid of the poverty but to restricting the plenty. They have attempted, by setting up monopolies, by introducing complicated restriction schemes, and sometimes by actual physical destruction of existing stocks or plant, to create those conditions of scarcity which alone would restore the profitability of new investment. Where possible, home production has been maintained (or even expanded) by restricting foreign

¹ Op. cit., p. 31.

imports; but where this has not been possible, or has proved insufficient, steps have been taken to restrict home production as well.

But the analysis also shows that such steps are bound to prove inadequate. As soon as profitability is restored, new investment begins to expand again, frequently at a higher level of technical development. In this way the very solution of the problem produces its own recurrence, and probably in an intensified form. In fact the only permanent solution on these lines would be to prohibit new technical development altogether and to restrict new investment to the level necessary to maintain existing production!

Such a solution involves of course the complete abandonment of all hopes of raising the standard of living of the mass of the people. It involves perpetuating the poverty of the many to maintain the profits of the few. But is it the only solution compatible with the maintenance of production for profit? Mr. Keynes, as we have already briefly indicated, thinks there is another solution. Let us examine it more closely.

The problem arises, it will be remembered, from the fact that the marginal efficiency of capital in highly developed capitalist countries like England is to-day very much lower than it was in the nineteenth century, and that it is still falling. This is due principally to the phenomenal pace of technical development¹ since the war, with its consequent rapid increase in the quantity of capital assets at our disposal; but it has also been accentuated by two other factors. The first is the slowing down in the rate of growth of the population—a slowing down which will turn into an absolute decline within the next few years. In the past the growing abundance of capital assets has been partially offset by the great increase in the population for which they have had to provide. Now this offset has to a large extent vanished, with the result that a given rate of capital development reduces the marginal efficiency of capital much more rapidly than it did in the nineteenth century.

¹ The *immediate* effect of some technical developments which involve considerable scrapping and replacement of existing plant may be to raise the marginal efficiency of capital; but such an effect would be only temporary.

The second factor accentuating the fall is the diminution in the amount of capital required for opening up undeveloped territory. During the latter part of the nineteenth century and the early years of the twentieth century a great deal of capital from the "old" countries went to opening up and developing large tracts of hitherto unexplored country in Africa, China, America and elsewhere. Nowadays the opportunities for this kind of development are far fewer. The virgin lands are now under cultivation, and the wide open spaces are no longer open. In the United States the "frontier" of cultivation has been pushed back to the Rockies and there is no longer unclaimed land to be had for the asking by anyone willing to develop it. This does not mean, of course, that opportunities of capital development are no longer available, or that the new countries are as highly developed as the old. But it does mean that the *extensive* development of new areas has now largely given way to the *intensive* development of countries already partially developed. The initial highly profitable phase of "opening-up," in which fortunes were made almost overnight, has now largely given way to the more humdrum development associated with the older countries. The marginal efficiency of capital is tending to fall in the new as in the old countries, because there are no longer undeveloped lands to maintain it by absorbing new capital on the same scale as hitherto.

For these three reasons, then—the unprecedented pace of modern technical development, the rapid fall in the rate of population growth in the older countries, and the practical completion of the opening-up of new lands—the marginal efficiency of capital is now falling much more rapidly than in any previous period. Or rather, to be accurate, it *would* fall in this way if our resources were all fully employed. (Mr. Keynes goes so far as to suggest that, given full employment, it would fall to zero within a generation.) Actually, as we know to our cost, it is prevented from falling at the expense of maintaining a large part of our capital and labour unemployed.

What, then, is Mr. Keynes' solution? His first step is to reduce the rate of interest. We have already seen that what the business man is concerned with is not the profitability of new

investment alone, but the relationship between this and the rate of interest he has to pay on borrowed money. If this latter can be reduced as fast as the marginal efficiency of capital falls, then the *net* profit obtainable from new investment will remain unaltered, and the inducement to invest will not be weakened. We can, in effect, maintain the net income accruing to business men out of a falling gross profit by sacrificing the share accruing to the rentier.

How is this to be done? By increasing the quantity of money, says Mr. Keynes; in other words, by expanding credit. But will the rentier consent to be sacrificed in this way? Up to a point he will have no choice; or rather, his choice will be between accepting a reduced rate of interest on his money or no interest at all. But there is a limit below which rentiers will in fact prefer the advantages of liquidity involved in holding cash to the small income obtained by investing it. There are in fact certain institutional and psychological reasons why the rate of interest cannot fall below a certain minimum. For example, the actual costs to the banks of making advances are estimated at 2 to $2\frac{1}{2}$ per cent, so that it is extremely unlikely that the rate charged on bank advances will fall below $2\frac{1}{2}$ per cent. Then there is the fact, to which reference has already been made, that the lender undertakes a double risk, the commercial risk inseparable from new enterprise and the moral risk that the borrower may be dishonest. The cost of these two risks is included in the interest charged, and they form a minimum below which the nominal rate of interest cannot fall even if the net rate (exclusive of such charges) were to fall to zero. There also seems to be a psychological resistance brought into play, a kind of "rentiers' strike," if the rate of interest falls to what is considered an "unreasonably" low figure. This is illustrated by the saying, quoted by Mr. Keynes, that "John Bull can stand many things, but he cannot stand 2 per cent." Finally, there is income-tax and sur-tax, which the prospective lender has to deduct before arriving at the net income to be obtained by sacrificing liquidity.

For these reasons the reduction of the rate of interest is likely to prove of only limited efficacy. In fact, in Mr. Keynes' view:

The acuteness and the peculiarity of our contemporary problem arises, therefore, out of the possibility that the average rate of interest which will allow a reasonable average level of employment is one so unacceptable to wealth-owners that it cannot be readily established merely by manipulating the quantity of money. . . . The most stable, and the least easily shifted, element in our contemporary economy has been hitherto, and may prove to be in future, the minimum rate of interest acceptable to the generality of wealth-owners. If a tolerable level of employment requires a rate of interest much below the average rates which ruled in the nineteenth century, it is most doubtful whether it can be achieved merely by manipulating the quantity of money.¹

What other steps can be taken if, after the rate of interest has been reduced as far as possible, the volume of investment is still insufficient to provide full employment? Then, says Mr. Keynes, the State must step in to fill the gap, and itself undertake public works of one sort or another on a scale sufficient to offset the deficiency in private investment. The State can do this, because it "is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage,"² rather than on that of immediate profit.

Apart from unemployment due to the long-period fall in the marginal efficiency of capital, unaccompanied by a corresponding fall in the rate of interest, there are also very violent short-period fluctuations in marginal efficiency, due to the changes in the confidence with which business men regard the future: changes which are accentuated by the dependence of new investment on organized stock exchanges where the prevailing motive is speculation. The effect of these fluctuations on employment is aggravated by the tendency of a rising stock-market to increase what Mr. Keynes calls the "propensity to consume" (i.e. the proportion of the national income which is spent on consumption goods), and of a falling stock-market to diminish it. Individuals who speculate in stocks and shares tend to treat their Stock Exchange profits as an addition to their income, while losses are treated as a reduction in income. The result is

¹ Op. cit., pp. 308-9.

² Op. cit., p. 164.

that they spend freely when stock prices are rising, and curtail their consumption when prices are falling. Since a fall in consumption increases the amount of new investment necessary to maintain full employment, and since new investment is itself restricted when stock prices are falling, it is clear that this tendency greatly aggravates the problem. Mr. Keynes therefore concludes "that the duty of ordering the current volume of investment cannot safely be left in private hands"¹ and he therefore advocates the "socialization of investment." What exactly is meant by this is not quite clear, but it would appear that he envisages certain "central controls" which will determine the *volume* of new investment, but not its *direction*.

These, then, are the steps Mr. Keynes thinks should be taken to resolve the contradiction of coexistent poverty and unemployment. First, the reduction of the rate of interest; second, state investment, of the nature of "public works," housing schemes, etc. sufficient to fill the gap between the volume of private investment and that necessary to maintain full employment; and third, the setting up of "central controls" to take from private hands the function of ordering the current volume, but not the direction, of new investment. Within this framework, he wishes to retain private enterprise and private initiative.

If the State is able to determine the aggregate amount of resources devoted to augmenting the instruments [of production] and the basic rate of reward to those who own them, it will have accomplished all that is necessary. . . . It is in determining the volume, not the direction of actual employment that the existing system has broken down. . . . Beyond this no obvious case is made out for a system of State Socialism.²

How far are these steps likely to prove adequate to solve the problem? Obviously a final and conclusive answer is not possible until they have been tried out in practice over a sufficiently long period of time, but there are various criticisms which it is pertinent to raise at this juncture.

The first point which the reader who has followed the analysis

¹ Op. cit., p. 320.

² Op. cit., pp. 378-9.

so far is likely to ask is: Why does Mr. Keynes concentrate his attention on stimulating the volume of new investment? Why not directly increase the "propensity to consume" by raising the standard of living of the masses? For it is clear that if we can raise the proportion of the national income which we spend on consumption, the smaller will be the volume of new investment necessary to maintain full employment; and after all is not the most natural way of increasing employment to enable the mass of people to buy more goods? Why not then just raise their wages?

Mr. Keynes' answer to this is that his policy *would* increase consumption. So long as there are unused resources available, consumption and investment are complements, not alternatives. If you increase new investment, you increase employment, and so stimulate consumption. Alternatively, if you increase consumption, provided that by so doing you do not lower the marginal efficiency of capital, you increase the demand for new investment goods in order to provide for the increased output of consumption goods.

Mr. Keynes, therefore, is not averse to increasing the propensity to consume by redistributing incomes through taxation and particularly by increasing death duties. He quite rightly points out that "The outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes."¹ Furthermore,

In contemporary conditions the growth of wealth, so far from being dependent on the abstinence of the rich, as is commonly supposed, is more likely to be impeded by it. One of the chief social justifications of great inequality of wealth is, therefore, removed.²

Thus the effect of heavy death duties is to stimulate investment by increasing consumption, and not to diminish it as is usually thought.

But we have still not answered the question: why not directly increase wages? Mr. Keynes does not directly deal with this point, but the answer is clear from his analysis. It

¹ Op. cit., p. 372.

² Op. cit., p. 373.

is true that an increase in wages would stimulate consumption and hence investment; but at the same time it would increase the employers' *costs* and so reduce their expected profits. In other words an all-round increase in wages would operate directly to reduce the marginal efficiency of capital by diminishing the expected returns from new investment. The only case in which this would not operate would be when prices were rising faster than wages so that the profit margin was actually increasing. In this case, however, *real* wages would fall, and with it the standard of living. A rise in *real* wages will tend to increase unemployment so long as production is dependent on profits, by increasing costs and so reducing the profit margin.

The same argument applies, to some extent, to increases in income-tax, since these directly affect company profits. It applies to a much smaller extent to sur-tax, and hardly at all to death duties. Hence Mr. Keynes' preference for these latter forms of tax.

This brings us right up against the central difficulty of production in a capitalist society. So long as production is carried on for private profit, wages fulfil a double role. They are *costs of production* which it is to the individual employer's interest to keep as low as possible so as to increase his profit margin, and at the same time they form to a very large extent the *market for consumers' goods*, which it is to the interests of employers collectively to expand. Employers as a whole are thus in a dilemma. They want to reduce their wages bill in order to cut down their costs; but they also want to expand the market for their goods, which in the last resort means expanding the wages bill.

In the early days of industrial capitalism this difficulty, for a variety of reasons, was not felt very acutely. Some of these reasons have already been touched upon. The scarcity of capital assets at that time was so great, particularly in view of the rapid growth of population and the opening-up of overseas markets, that the chief problem was not so much to expand consumption as to limit it in order to enable the utmost expansion in the production of capital goods to take place. In these circumstances the dual role did not cause much conflict;

in fact, rather the reverse since the limitation of home consumption enabled capital development to take place more quickly. Nowadays, however, the position has radically changed; what we have called the *extensive* industrialization of the world is now largely completed and has given place to *intensive* development within the different countries. For this type of development a low propensity to consume, so far from being an advantage, is a positive drawback.

We have now reached the stage where an expansion of home consumption has become an essential condition of further capital development, and this in turn necessitates, as Mr. Keynes clearly realizes, a reduction in the great inequality of wealth that now prevails; or, to put the matter more concretely, an increase in the proportion of the national income accruing to the working class (for inequality of wealth is important mainly because of its effect on the distribution of incomes). It is at this point that the contradiction involved in the dual role played by wages becomes revealed. Mr. Keynes claims that his policy for solving this contradiction (the chief feature of which, as we have already seen, is the extinction of the rentier by the gradual diminution of the rate of interest to somewhere near zero, coupled with increased direct taxation), will fundamentally change the character of capitalism by eradicating its bad features while retaining its good ones. To quote his own words:

This state of affairs would be quite compatible with some measure of individualism, yet it would mean the euthanasia of the rentier, and, consequently, the euthanasia of the cumulative oppressive power of the capitalist to exploit the scarcity-value of capital. Interest to-day rewards no genuine sacrifice, any more than does the rent of land. The owner of capital can obtain interest because capital is scarce, just as the owner of land can obtain rent because land is scarce. But while there may be intrinsic reasons for the scarcity of land, there are no intrinsic reasons for the scarcity of capital. . . . I see, therefore, the rentier aspect of Capitalism as a transitional phase which will disappear when it has done its work. And with the disappearance of its rentier aspect much else in it besides will suffer a sea-change. It will be, moreover, a great advan-

tage of the order of events which I am advocating, that the euthanasia of the rentier, of the functionless investor, will be nothing sudden, merely a gradual but prolonged continuance of what we have seen recently in Great Britain, and will need no revolution. Thus we might aim in practice (there being nothing in this which is unattainable) at an increase in the volume of capital until it ceases to be scarce, so that the functionless investor will no longer receive a bonus; and at a scheme of direct taxation which allows the intelligence and determination and executive skill of the financier, the entrepreneur *et hoc genus omne* (who are certainly so fond of their craft that their labour could be obtained much cheaper than at present) to be harnessed to the service of the community on reasonable terms of reward.¹

Now it must be admitted that this policy is on the face of it a very attractive one. It offers to get rid of all our troubles by steps which can be introduced gradually and without upsetting any of our established institutions. Above all, it has the supreme merit that, while none of the steps taken individually can be termed in any sense revolutionary, yet their cumulative effect is to produce just those revolutionary changes in society as a whole which many people nowadays desire. It provides the "Left" with all they desire without causing the upheaval in our social life so much feared by the "Right." It is, in fact, the perfect panacea—provided it works out in the way he suggests.

But will it work out in this way? Let us consider his solution in a little more detail.

He realizes that nowadays it is consumption that limits production, rather than vice versa. He realizes also the disastrous effect of the falling rate of profit (due to the diminishing scarcity of capital assets) in retarding new investment and hence in creating unemployment; and he wants to get over this difficulty by increasing the business man's share of gross profits by reducing the rentier's share.

Now it may be admitted that the reduction of the rate of interest will probably help to stimulate new investment. Nevertheless, its effect must be limited, partly because (as

¹ *Op. cit.*, pp. 375-7.

Mr. Keynes recognizes) the marginal efficiency of capital may fall so rapidly that *no* practicable reduction in the rate of interest can offset it, and partly because investors will increasingly refuse to lend at fixed interest and will insist on a share in the equity. In other words, new capital will be increasingly raised in the form of issues of ordinary shares rather than in preference shares or debentures. For example, the bulk of lending at fixed interest is done by institutional investors such as insurance and trust companies, rather than by private investors, and these have already been forced to try to offset the fall in income from fixed interest securities by increasing their investment in ordinary shares.

It is thus very doubtful whether the euthanasia of the rentier will be accomplished in the way Mr. Keynes suggests. He himself points out that there are various costs involved in bringing borrower and lender together which may amount to as much as 2 to 2½ per cent, and that there may also be psychological difficulties in the way of reducing the rate of interest even to this figure. What he does not point out is that the reduction in the rate of interest will affect the institutional investor far more than the private investor. The latter is far more concerned with investment in ordinary shares, and this tendency will be increased by the reduction in the income obtainable from fixed interest securities. Thus while it may be true that the rentier in the *technical* sense of a recipient of a fixed unearned income may disappear, yet in the wider sense which is alone relevant to his argument, that of a recipient of any form of unearned income from property, he will not disappear.

We may therefore conclude that reducing the rate of interest, while temporarily stimulating new investment, will not get rid of the rentier class (and hence of the great inequality of wealth at present prevailing), but will merely change the form of new investment from fixed interest securities to ordinary shares. Furthermore, its main effect will be on the institutional investor. In particular, life assurance companies, who have at present to earn a certain rate on their funds in order to fulfil their current insurance contracts, will be forced to increase

their investments in ordinary shares. The only alternative will be for the State to take them over, which involves the State Socialism Mr. Keynes is so anxious to avoid.

This change-over on the part of the investor from fixed interest to ordinary shares will have two further consequences. In the first place it will tend to increase the amount of Stock Exchange speculation. Fixed interest securities are in general purchased in order to obtain an income, but ordinary shares tend to be bought for capital appreciation. The change-over will thus increase the tendency, so scathingly denounced by Mr. Keynes, for the country's capital development to become the "by-product of the activities of a casino."

In the second place, to the extent that the change-over occurs, the full force of the falling marginal efficiency of capital will fall on the shoulders of the holders of ordinary shares; i.e. on those in whose interest industry is ultimately run. And their reaction will be prompt and immediate. They (or, to be more accurate, those who manage industry on their behalf) will attempt to restore the level of profits on their investments by cutting down their costs; and in the final analysis this means cutting the wages bill. Not necessarily, of course, by directly reducing wage-rates; there are other ways of reducing costs, by speeding-up, by reorganization to enable one man to do the work of two, by substituting unskilled labour for skilled, or female labour (at lower rates of pay) for male. But the final effect is the same; to reduce the purchasing power of the mass of the population, and hence to contract the market for consumers' goods. Alternatively, they will attempt to maintain profitability by restricting output by means of monopolies, restriction schemes, etc.

Once again we run up against the contradiction inherent in capitalist production. Mr. Keynes' attempt to overcome this contradiction by passing it on to the holders of fixed interest securities may be temporarily successful; but the odds are that they will soon get tired of holding the baby, and their efforts to pass it back again will intensify the difficulties still further.

It is therefore probable that his second line of defence, the undertaking of new investment by the State, will have to be

brought into action more speedily and on a wider scale than he himself appears to envisage. What are the implications of this State participation in the country's capital development (which will of necessity be on an increasing scale)?

Mr. Keynes makes it clear that when he talks of the "socialization of investment" he envisages State control of the volume only and not of the direction of new investment. In other words there is to be no State ownership and no detailed State planning. Nevertheless, it is clear that in so far as the State itself undertakes new investment, *both* these elements must be present in greater or less degree. If the State is to engage directly in projects of capital development, it must clearly plan each of those projects in detail. It will also have to consider each project in relation to all the other projects it is undertaking, as well as to the volume and direction of the investment that is being undertaken privately. For example, if the State engages on a new housing scheme, or on slum clearance, it will have to bear in mind in planning these schemes the number, types and location of the new houses that are being built by private enterprise, and how they will be affected by the State schemes. It follows that as the part played by the State in capital development increases, so will the area of our economic life which is consciously planned increase also.

Furthermore, the State investment is to be based on considerations not of immediate profitability but of the "general social advantage." This must clearly be the case, because if the investment were immediately profitable it would be undertaken by private enterprise. (It is because new undertakings of this type are not available in sufficient quantity to maintain full employment that the State has to step in at all.) It follows that the State planned area of economic life will be based on an entirely different principle from that of the area still under private control. In fact, the principle of production for use (for this is what it amounts to) is not only different from, it is the complete antithesis of, the capitalist principle of production for profit; and it is difficult to see how it will be possible to work the two in harmony. If a substantial portion of our economy is based on the principle of production for use while the re-

mainder is operated for private gain, the two are almost certain to come into conflict.

For example, in the case mentioned above of a State housing scheme, the houses will have to be let at what is called an "uneconomic" rent; that is to say, a rent for which it would be unprofitable for private enterprise to build. These houses will compete with those of the same type built by private enterprise; in fact they will effectively oust private enterprise from the field, at any rate in the locality concerned. For clearly no one is going to rent a house from a private builder when he can get a similar one built by the State or local authority at a lower rent. The State housing scheme will thus considerably restrict the activity of private builders, and they, not unnaturally, will object. (It may perhaps be objected that since the State is only building houses which it is unprofitable for private enterprise to undertake the latter will be unaffected. This, however, overlooks the fact that there would probably be *some* demand for the type of house the State or local authority is building even at the higher rent at which it is profitable for private enterprise to build, but that this demand will be taken away from the private builder by the operation of the State scheme.) What is most likely to happen (what has, in fact, already happened) is that the private builders will clamour to be allowed to build the houses themselves and to be given a subsidy to enable them to do so with a profit to themselves.

In other fields of activity the same difficulty will arise. It can only be avoided if the capital development undertaken by the State is restricted to fields which do not compete at all with private enterprise; and in practice such fields are extremely difficult to find, and will become increasingly so as the area of State investment widens. We are likely, therefore, to see an increasing demand that the State should not undertake such capital development directly, but should enable private enterprise to do so by the liberal grant of subsidies. In fact, as we shall see in the next chapter, this has already occurred on quite a considerable scale.

It is reasonable to assume that by "State investment" Mr. Keynes means the direct undertaking of capital development

by the State, and not just the subsidizing of private enterprise. Indeed, the latter is both morally indefensible and, in the long run, economically unworkable. It is morally indefensible because the sole justification for the private ownership of the means of production is that the operation of the profit motive enables the right things to be produced in the right quantities at the right time and place. The business man is supposed to undertake the risks of enterprise. If the State is to undertake them there is no need to pay private enterprise for risks it is no longer shouldering. In so far as the State plans capital development the business man is no longer "enterprising"; he is reduced to the status of a salaried manager or technician, and should be paid as such. To subsidize the profits of particular groups of capitalists is to benefit them at the expense of the rest of the community without getting any service in return.

It is economically unworkable because, in the last resort, the subsidies must be paid at the expense of the general body of consumers. This will reduce the "propensity to consume" and so intensify the contradiction we are trying to solve. If the capitalists in one industry or section of industry obtain a subsidy, then sooner or later every other capitalist who is not making what he considers to be an adequate profit will demand a subsidy too. There will in fact be a general scramble for subsidies, a scramble which will be intensified as the marginal efficiency of capital falls and more and more industries become unprofitable. The result will inevitably be a great increase in "log-rolling" and political life will be reduced to a question of lobbying by rival groups of vested interests for financial favours, with all the bribery and corruption that that implies.

The subsidies obtained will have to be paid for out of taxation, which in turn will fall either on the industries still making profits, or on the general body of wage and salary-earners, who between them make up the great bulk of the nation. As the marginal efficiency of capital falls, so the demand for subsidies will increase, while the number of industries capable of contributing to their cost will diminish; from which it follows that this cost will be thrown more and more on to the general body of consumers. There will, that is to say, be a transfer on an

increasing scale from earned incomes to unearned incomes, from incomes obtained by work to incomes obtained by virtue of the ownership of the means of production. Since on the whole those who work for their living form the poorer sections of the community, while those who live on unearned incomes are in the main the well-to-do, this transfer will in effect be a transfer from the poor to the rich. This in turn can only result in reducing the proportion of the national income spent on consumption goods, and hence in diminishing the volume of new investment and of employment.

Thus the policy of maintaining the profitability of private enterprise by means of Government subsidies, although it may temporarily increase employment, will in the end only make the situation worse. Nevertheless, because of the difficulty of reconciling State investment based on production for use with the continuance of private investment based on production for profit, this policy is far more likely to be adopted than that proposed by Mr. Keynes. Let us for the moment, however, assume that his policy is adopted, and see what the ultimate outcome will be.

We have already seen that in so far as the State directly undertakes new capital investment, it must both own and plan the projects it undertakes. It may, of course, operate such schemes through the local authorities (as, for example, in the case of housing), or it may set up various non-profit-making Boards to carry out particular schemes, but in the last resort these subsidiary organizations will have to be responsible to some central authority under the direct control of the State. In particular, some such authority will have to be responsible for planning the different schemes and dovetailing them into one coherent whole.¹ So far, little coherent action of this type has been undertaken in this country. The State has undertaken "public works" at various times, and quite a considerable amount of capital development is carried out by different bodies under varying degrees of public control; but these activities

¹ Cf. the demand for a Ministry of Supply to co-ordinate and plan re-armament. This has become necessary even although the actual production is being carried out by private enterprise.

are carried out independently and are not co-ordinated in a general plan. The schemes of capital development undertaken by the Central Electricity Board, for example, or by the Port of London Authority, are decided on their merits by the authorities concerned, and are not considered in relation to, say, the Government's housing or slum-clearance schemes. But the essential point of Mr. Keynes' proposals is that the State should undertake new investment on just that scale necessary to maintain full employment, having regard to the new investment being carried out by private enterprise. In other words, it must fill the gap between the volume of new investment necessary for full employment, and that which private business men consider it profitable to undertake. Since the latter will be continually changing, and probably changing quite suddenly and drastically, the State will have continually to vary its own new investment. To do this it will have to set up a central authority to co-ordinate all the plans of capital development proposed by the various public or semi-public bodies, and to see that the total volume of new investment undertaken by such bodies is neither more nor less than that necessary to maintain full employment.

As the marginal efficiency of capital falls the extent of the capital development undertaken by the State will increase. On Mr. Keynes' own estimate, the marginal efficiency of capital will be reduced to zero within a generation if full employment is maintained, but long before this point has been reached private investment will have become completely unprofitable. It is therefore reasonable to suppose that by the time the marginal efficiency of capital has fallen to, say, 2 per cent, the State will have had to undertake the whole of the country's new capital development; which means, of course, that it will be responsible for the whole of the country's industry and trade. Mr. Keynes may think that no case has been made out for State Socialism, but on the basis of his own policy such a system would be brought about within say fifteen to twenty years.

The reader may object that while the State may be forced to assume full responsibility for all *new* capital investment, there

is no reason why it should take over existing industrial enterprises, but a moment's thought will show that the one is impossible without the other. New capital development is at present undertaken in the main by existing industrial enterprises, either by raising fresh capital in the new issue market or out of profits ploughed back into the business. The amount of new capital absorbed in the creation of completely new companies is relatively insignificant. Furthermore, existing businesses *must* undertake such new investment if they are to survive. Methods of production are continually changing as new and improved processes are invented, and existing businesses must adopt these new processes on pain of being driven out of business by their more enterprising competitors. So long as there is free competition the profitability of existing capital cannot remain above that of new capital, for if the profits obtainable in any particular industry on the existing capital are greater than those obtainable on new investment in general, fresh capital will flow into that industry until the profits obtainable there are forced down to the general level. To put the matter another way, it is impossible under conditions of free competition to isolate existing capital assets from new capital assets, and to maintain the profitability of the former while that of the latter is steadily falling.

But suppose that competition is prevented by the combination of the existing firms in an industry with the object of deliberately excluding the entrance of fresh capital? It is perfectly true that the rate of profit in particular industries can be artificially maintained by the imposition of monopolistic restrictions of one form or another, and as we shall see in the next chapter such restrictions have been adopted by one industry after another in recent years, frequently with direct governmental assistance. Indeed, it must be reckoned a serious weakness in Mr. Keynes' analysis that he almost entirely ignores this tendency in modern industrial development. Yet on the basis of his own analysis it is an obvious tendency to expect. Clearly, if the profitability of capital assets arises out of their scarcity, the obvious policy for the owners of such assets is to keep them scarce! And in fact they have not waited

for Mr. Keynes to tell them what to do. Long before his book was published, when orthodox economists were still talking about the beneficent effects of free competition (as indeed most of them still are), the owners of capital had instinctively realized that combination to restrict competition and limit output was often a far more paying proposition than the unrestricted expansion of production; and in the difficulties of the post-war world they have turned increasingly to this solution of their problems.

In the next chapter we shall give detailed evidence to show that the capitalist solution for the paradox of poverty and plenty has been to destroy the plenty by the deliberate restriction, or even the actual destruction, of output; supplemented where these devices have proved impracticable or inadequate by governmental subsidies. The analysis of this chapter enables us to see the theoretical explanation of these policies, and their justification from the capitalists' point of view. They have been told so often by economic theorists that the profit motive is the mainspring of production, and that the earning of adequate profits is an essential stimulus to increasing output, that they have come to regard the earning of profits as a natural right. Profit, from being the means to an end (that of increasing production), becomes an end in itself. Consequently, when, owing to the falling marginal efficiency of capital, the necessity to earn profits becomes an obstacle to increased output, when in fact the maintenance of profits can only be achieved by *restricting* production, it is not to be wondered at if the owners of capital assets prefer the maintenance of profits to the extension of production. The wonder would be if they did not!

The fact of the matter is that orthodox economists have for so long identified production for profit with production for use that they have completely failed to recognize the inherent contradiction between the two. In the early days of capitalism this contradiction remained latent and their view was consequently not unpalatable. Now this contradiction has emerged into the open and is dominating our economic life, but their whole training and tradition prevent them from realizing it.

Even Mr. Keynes, to whom all credit must be given for being the first orthodox economist to realize the existence of this contradiction, has failed to realize the full implications of his theories. He is still sufficiently under the influence of orthodox tradition, apparently, to believe that, faced with the alternative of maintaining full employment by increasing the sphere of direct State investment based on the general social advantage, or of maintaining profits by means of subsidies and the restriction of production, the owners of capital assets will prefer the former. But all experience goes to show that in actual practice they, and any government whose members believe in the private ownership of the means of production, will almost automatically choose the latter. They will not, of course, consciously counterpoise public interest and private profit in the way we have done, and deliberately choose the latter; but their whole upbringing and outlook will make the maintenance of the profitability of private enterprise seem the right and proper thing to do. Mr. Keynes, in fact, has forgotten that *his* objective, the maintenance of full employment, is not the objective of our financiers and captains of industry. *Their* primary concern is to make profits, and the maintenance of full employment will be pursued only in so far as it is compatible with this.

This has been a long and rather intricate chapter, and it may be as well therefore to try and summarize its conclusions.

Mr. Keynes has shown that capital assets (factories, machines etc.) are profitable to their owners only because they are *scarce*. As our powers of production increase, so this scarcity will diminish; and consequently the ownership of the means of production will become less and less profitable. Unfortunately in our present economic system production is only carried on provided it is profitable, and so we are faced with the dilemma that the more we are *able* to produce the more difficult does it become to carry on production. There are only two ways out of this dilemma. The first is to maintain the profitability of capital assets by keeping them scarce; that is to say, by deliberately forgoing the benefits of technical and scientific advance and restricting production to the level that is profitable.

The second is to throw overboard the hampering principle of production for profit and to plan consciously for the maximum extension of production on the basis of production for use.

It will be noticed that both alternatives involve planning. The difference is that in the first the planning is piecemeal, industry by industry, whereas in the second it covers and coordinates the whole economic life of the country. Furthermore, the ends to which the planning is directed are different. The first is planning for destruction, the second for expansion. The latter may be described, in the Webbs' well-known phrase, as "planned production for community consumption," while in the former, to quote Barbara Wootton's almost equally famous epigram, "the community is more planned against than planning." In either case the old days of free competition and unrestricted private enterprise have gone beyond recall.

Mr. Keynes makes a valiant effort to steer a middle course by, in effect, making the State undertake only that production which private enterprise finds unprofitable. In this way he hopes to secure the gradual extinction of the rentier while still allowing the financiers and industrialists to control the actual direction of production. Even on his own assumptions, however, capital assets will have become unprofitable to their owners in less than a generation, which means that within this time the area of direct State investment will have widened to cover the whole of industry and trade, and the financiers and industrialists will have become in effect salaried officials.

Now it is undoubtedly true that a programme of "public works" will, under appropriate conditions, produce a temporary alleviation of the difficulties of capitalist production. The experience of Sweden, for example, has shown that such a policy applied at the bottom of a slump will, if the other circumstances be favourable, be of considerable assistance in producing a revival of industrial activity. But it is a far cry from this temporary alleviation of a *cyclical* depression to the permanent cure of the difficulties caused by the *secular* downward trend of the marginal efficiency of capital. The one is a purely

temporary incursion of the State into the industrial field which does not seriously infringe the prerogatives of existing property owners. The other involves a progressive encroachment on, and finally the complete extinction of, such prerogatives. In this country even the former was met with an uncompromising negative by the National Government. Is it likely that the latter would meet with any less resistance? The Government's policy (at any rate so long as it is drawn mainly from the property-owning section of the community) is far more likely to be directed towards "helping" private enterprise by means of subsidies, tariffs, marketing schemes, etc.

Nor is this merely a surrender to sectional vested interests. The antagonism between the principles of production for profit and production for use is too deep to allow of their harmonious co-operation in the way Mr. Keynes suggests. The difficulty even with a temporary public works policy is that it is far from easy to find public works which do not compete with existing private undertakings. This difficulty becomes intensified a thousand-fold when the State participates permanently, and on an increasing scale, in the direct capital development of the country. The limited field of undertakings which do not compete with private enterprise will soon be exhausted, after which the State enterprises will increasingly conflict with those under private control. Even where there is no direct competition, the State will in all probability be hampered in its planning by the necessity of making concessions to various vested interests. The greater the volume of State investment the greater will be the opportunities for private monopolies or monopolistic combinations to obtain excessive profits by charging monopoly prices for materials supplied to the State, and the greater also will be the incentive to form such combinations.¹ It is likely also to find itself faced with demands for "compensation" by vested interests who find their interests "threatened," either in reality or imagination, by the State's activities. Sir

¹ For example, the Associated Portland Cement Co. and its subsidiary and associated companies already control between them 80 per cent of this country's output of cement, a material the demand for which would be considerably enhanced by a public works policy.

Ernest Simon¹ has graphically described the ease with which the Mossoviet can plan the development of Moscow, as compared with the difficulties experienced by the L.C.C. in planning that of London, because of the necessity of the latter to placate existing vested interests. As the sphere of State planning increases, these difficulties are likely to be rapidly intensified.

We may conclude, then, that a system of "planned production for community consumption," or, more shortly, socialism, is the only final solution of the paradox of poverty in the midst of potential plenty. Even if Mr. Keynes' proposals were adopted such a system would become essential before many years were past, and in practice, because of the difficulties of carrying on the economic life of the country in two separate sections based on completely opposite and hostile principles, this system would have to be introduced at a much earlier date if full employment and production are to be maintained. The choice really lies between planning for restriction in the interests of private profit and planning for production in the interests of the whole community.

This does not mean, of course, that it is impossible for a progressively-minded government to do anything, short of introducing full-blooded socialism, to maintain the general standard of living in the face of the difficulties caused by the failure of new investment as a result of the tendency of the rate of profit to fall. On the contrary, it is clear from what has already been said that such a Government, provided it were sufficiently *determined*, could do a great deal to create employment and to maintain, or even increase, the standard of living, both by direct State investment (as, for example, in housing and slum-clearance schemes) and by expanding the social services. It does mean, however, that such a Government, if it is to succeed, would have to be prepared to incur the hostility of the business world, and to wage a continual struggle against the restrictive tendencies inherent in capitalist production. It means, also, that the Government would have continually to expand the volume of State investment and so would inevitably

¹ *Moscow in the Making*, by Sir E. D. Simon and others. Chapter 8, "The Mossoviet, Its Advantages for Town Planning."

be driven *ultimately* to socialism. In other words, the two principles of production—for community consumption and for private profit—can *for a time* live side by side, but they will be in continual conflict and eventually one will have to give way. In France, the struggle has been won, temporarily, for private profit. In the United States, the conflict is still going on and the issue is still in doubt, but it is noteworthy that the volume of employment has varied directly with the volume of public spending. Socialism, it is clear, represents the resolution of this conflict by the victory of one of the contending principles—that of production for use; it is the end-product, and not the beginning, of the struggle. Whether the struggle gets as far as that depends on the strength and the determination of the Government to carry it on in the face of the increasing hostility of “Big Business,” with its continual pressure for restriction (to say nothing of subsidies) in order to “restore the normal profitable working of private enterprise.”

The reader may perhaps feel that this conflict between the principles of production for use and for profit has been exaggerated, and that what we have termed the “restrictive tendencies inherent in capitalist production” are not nearly so great as we have made them out to be. It may be as well, therefore, to examine their growth in more detail, and to this we will now turn.

CHAPTER IX

THE GROWTH OF MONOPOLIES, SUBSIDIES AND RESTRICTION SCHEMES

(I) *Planned Destruction*

IN the last chapter we saw how, as the productive capacity of a Capitalist society develops the rate of profit tends to fall and thus to slow down further development. Since profitability is dependent on scarcity, it follows that the growth in the productive powers of the community, which is all the time tending to make things less scarce, must reduce the profitability of new capital development and so lessen the inducement to financiers and industrialists to undertake such development. This, we saw, is the explanation of the tragic waste of productive resources which exists alongside the most appalling poverty. The human needs are not satisfied because it is not profitable to do so. Men and machines have to remain idle because to employ them would cause such an increase in output as would destroy the profitability of production and so the incentive to produce. Scarcity is preferred to abundance, and profits and poverty go hand in hand.

The operation of the profit motive tends automatically to reduce the level of employment to that which can be operated profitably, but the process is a long and painful one. It is no matter for surprise, therefore, that the capitalists have tried to supplement the automatic workings of the system by deliberate attempts to maintain, or even increase, their profits by the use of monopolistic and restrictive devices of one sort and another. Volumes have been written describing and analysing these devices, and no full description will be attempted here. We shall content ourselves with a brief survey of some of the more flagrant of the devices that have actually been adopted since

the war, and more particularly since 1929, in order to provide practical proof of the theoretical conclusions of the last chapter. We shall, moreover, restrict our description for the most part to those schemes which have been promoted either directly or indirectly by the Government or the Bank of England, since the intervention and support of the State in such schemes is becoming increasingly the dominant characteristic of our current economic life. Finally, we shall give some examples of the other method used by the State to bolster up the profitability of private enterprise, the grant of subsidies.

Government assistance to private enterprise from the end of the war up to the beginning of the world slump in 1929 was mainly confined to the grant of subsidies, such as those to the coal and sugar beet industries, and to civil aviation. The only important restrictive device directly benefiting British home industry was the imposition of import duties on certain classes of goods under the Safeguarding of Industries Act of 1921. The purpose of this Act was to safeguard certain "key" industries, such as those manufacturing chemical dyestuffs, and to safeguard "employment in the United Kingdom against the effects of the depreciation of foreign currencies and the disposal of foreign goods at prices below the cost of production."

The classes of goods granted protection under the Act were gradually extended and finally included such varied articles as lace, embroidery, leather and fabric gloves, buttons, gas mantles, cutlery, domestic glassware and pottery, and artificial silk. The effect of the Act was mainly to increase the price of cheap imported goods from such countries as Czecho-Slovakia. It thus fell most heavily on the working class, who were the main purchasers of such goods and who could not afford the better quality but higher priced British-made goods. The total effect of the Act, however, was relatively limited, particularly as imports of foodstuffs were excluded from its operation.

Since the onset of the world slump in 1929, destruction and restriction schemes have increased very rapidly; so much so that people are no longer surprised or shocked by them, and they have become a generally accepted feature of world capitalism. Many of the individual schemes, in fact, are inter-

national in their scope, particularly those concerned with raw materials. An examination of some of these schemes will show how wide is their scope.

We may start with some examples of actual destruction. Since these mainly occurred in the sphere of raw materials and foodstuffs they for the most part took place abroad; but as Britain is largely dependent on imports for her supplies of such commodities, they are clearly relevant to our present discussion.

The most glaring destruction has taken place in foodstuffs. Even prior to the world slump individual cases of destruction occurred here and there. For example, so far back as 1924 the *New York World* reported that "Thousands of packages of cucumbers were destroyed on the offal dock to-day. . . . Every few years a large percentage of the Maine (U.S.A.) potato crop is left to rot in the ground."¹

More recently, and nearer to Britain, was the throwing into the sea in August 1933, between England and Spain, of 1,500,000 oranges. Again, the *Statist* for February 25th, 1933, records that in 1931 one-third of the British wheat and barley crop was used not for human consumption, but to feed cattle; while a report in *The Times* for March 20th, 1933, that "A substantial portion of the wheat supply is, at current low prices, being used for feeding livestock," shows that 1931 was not unique in this respect.

Even more symptomatic, in view of the gross under-consumption of milk in this country, is the following quotation from *Reynolds's* for April 22nd, 1934:

Gallons of milk are being poured into the Clyde. The milk is obtained from cows landed at Merkland's wharf, Glasgow, from Irish boats. Many of the animals give a supply of extremely rich milk, but the Ministry of Agriculture has decided that the milk must be drawn and thrown into the Clyde.

Such examples, however, are trivial beside the wholesale destruction of coffee that has gone on since 1931, coupled with a prohibition of new planting, in Brazil. In that country, which produces two-thirds of the world's coffee, about 40 million

¹ *New York World*, June 24th, 1924.

bags of coffee beans had been deliberately destroyed by the end of 1936, equivalent to over two years' production. This process of destruction has been graphically described by Mr. J. W. F. Rowe, in his book *Markets and Men*, written towards the end of 1935:

For nearly two whole years well over one million people in Brazil started working almost with the dawn each day, and worked all day for six months of each year in really sweltering heat, and for the other six months in a sun as hot as in the hotter summers in England. They worked at weeding, pruning and generally looking after about 2,000 million coffee trees. Towards the end of each year, with much labour, they gathered an average crop. They then prepared these crops for the market by a long series of operations, after which the coffee was carried by mules or by lorries over very rough roads anything from five to twenty miles to the nearest railway station, from which it was dispatched on a journey of anything from fifty to two hundred miles. At the end of that journey, it was thrown into enormous heaps, and with the aid of petrol these heaps were set alight, and the fires kept going until the last coffee bean had been completely and utterly destroyed. Two whole years' work gone up in smoke! Enough coffee to have supplied the whole world for nearly a year and a half!

This story is not strictly accurate, but it is only untrue in the sense that a part of each of a series of crops has been burnt, instead of two whole crops; the net result has been the same as in the story. During the last four years, Brazil has burnt a quantity of coffee equal to two good average crops.

Everyone has heard of this burning of coffee in Brazil, but perhaps some people have not appreciated the gigantic scale on which it has been done, nor perhaps thought of the tremendous expenditure of labour and capital involved in the production of all the coffee which has been burnt. No matter how one looks at the thing, it is clearly an appalling state of affairs.¹

The *Economist* of May 15th, 1937, stated that:

. . . restriction of supplies has been intensified during the present season and the price of coffee has consequently risen. The London quotation for Santos, which was little more than 38s. per cwt. a year ago, rose to almost 54s. last February, and is still 51s. per cwt.

¹ *Markets and Men*, by J. W. F. Rowe, pp. 22-3.

At present no less than 30 per cent of Brazil's annual output is destroyed. . . . Except in the case of the highest grades, a further 30 per cent must be delivered by the coffee producers to the regulating warehouses, to provide a store which enables the Government to retain a substantial measure of control over the market. . . . The remaining 40 per cent of production may be exported by the grower at will. In addition to these restrictive measures, the Brazilian Government recently entered into a price-raising agreement with other American producers.

The *highest* price of 54s. per cwt. mentioned in the above quotation is equivalent to just under 6d. a lb. as compared with a price of between 2s. and 3s. a lb. for coffee beans in London shops; while the price of 38s. given for the previous year is equivalent to about 4d. a lb. Actually, very little of the coffee consumed in this country comes from Brazil. Nearly half of it comes from British East Africa and India, one reason for which is that foreign coffee pays an import duty of 14s. per cwt., while Empire coffee only pays 4s. 8d. per cwt.

Partly as a result of its high price, coffee is regarded almost as a luxury in this country, at any rate so far as the working classes are concerned. (Probably another reason for the preference for tea is that coffee needs more milk, which also tends to make it relatively more expensive.) Nevertheless, the workers will certainly consume coffee provided its price is within reach of their purse, as the *Economist* article already quoted makes clear:

Consumption continued to gain ground until 1931, for coffee prices were falling while real wages were still rising. Imports rose sharply in 1932, but demand fell off and stocks in bonded warehouses were consequently largely augmented. The growth of general prosperity has since been reflected in a gradual expansion of demand for coffee. Although this tendency has recently been intensified, consumption is still well below the 1931 peak. Whether this leeway will be made up in the near future will depend in part upon price changes on the world market—and here Brazilian policy is clearly a relevant factor.

One immediate step to increase consumption would appear to

be to take off the present import duties, which would reduce the price of foreign coffee by $1\frac{1}{2}d.$ a lb. It would also appear desirable to examine the reasons for the very large spread between the price received by the growers and the price charged to the ultimate consumers. Finally, one is tempted to ask why wages should not be raised to enable the workers of this country to buy the surplus which at present is being destroyed in order to keep up prices. This common-sense solution, however, as we saw in the last chapter, is one that a capitalist economy cannot contemplate with equanimity.

The systematic destruction of foodstuffs, directly organized by the Governments of the countries concerned, has not been confined to coffee. Thus in Denmark the Government established a special destruction fund to finance the slaughtering of cattle and the burning of the carcasses, and it was reported in November 1933 that the Government abattoirs were slaughtering 5,000 cattle a week.¹ In the United States the same kind of thing was happening, as is shown by the following comment that appeared in the *News Chronicle* for October 17th, 1933:

It is a tragic irony that men and women in New York should be suffering the tortures of hunger while tens of thousands of pigs in farrow are being slaughtered in Iowa by the command of the Government, and farmers in Kansas or Nebraska are burning their grain.²

Again, the same paper reported on April 23rd, 1934, that:

The Chilean authorities are to slaughter 500,000 sheep simply for the tallow, the remainder of the carcasses will be burned. This step results partly from the effects of the Ottawa restrictions on the Chilean cattle and sheep trade.

A more comprehensive picture of the truly vast scale on which destruction was organized in the United States during this period is given by the figures for the expenditure of Roosevelt's Agricultural Adjustment Administration (taken from the *Economist* of December 30th, 1933).

¹ Quoted in R. P. Dutt's *Fascism and Social Revolution*, pp. 44-5.

² *Ibid.*, pp. 44-5.

TABLE XXI

Expenditures under the A.A.A.

<i>Allocation</i>	<i>Approximate Sum</i> (million dollars)
Cotton Acreage ploughed up ...	110
1934 Cotton Acreage Reduction ...	150
Emergency Pig and Sow Slaughter	33
Corn-Hog Production Control ...	350
Wheat Acreage Reduction ...	102
Tobacco Acreage Reduction ...	21
	<hr/>
Total ...	766
	<hr/>

A total of \$766 million, or over £150 million, spent on destruction in one year!

The following description of the measures taken by the A.A.A. to restrict cotton production, by the London and Cambridge Economic Service, will illustrate the drastic character of its activities:

The first task of the Agricultural Adjustment Administration was to secure an immediate reduction in the size of the American crop for the 1933-4 season. One million farmers were persuaded to plough up 10½ million acres of growing cotton in the summer of 1933. These 10½ million acres were expected to yield more than 4 million bales of cotton [equal to nearly one-third of the previous year's crop].

Since the programme of the Agricultural Adjustment Administration was adopted after the crop had been planted, farmers in 1933 were required to plough up part of their crop. In the next two years, however, the acreage of cotton which farmers were allowed to plant was limited. Farmers had to agree to reduce their planting of cotton in 1934 to 35 per cent to 45 per cent, and in 1935 to 25 per cent to 35 per cent less than in 1928-32 in order to receive compensatory payments from the Administration. Further, from April 1934 a heavy tax was placed on the ginning of cotton produced in excess of the allotments made to individual farmers. Output was thus reduced to 9½ million bales in 1934 and 10½ million bales in 1936. . . . The Agricultural Adjustment Act was declared unconstitutional by the United States Supreme Court in January 1936, but it had been intended to offer payments to farmers to reduce their planting of cotton in 1936 to 30 per cent to 45 per cent less than in 1928-32.¹

¹ Special Memorandum No. 45 on "Stocks of Staple Commodities," p. 6.

In Britain it is plant and machinery rather than foodstuffs and raw materials that have received the attentions of the destructionists, their main efforts having been concentrated on the textile, shipping and shipbuilding trades. Some of these destruction schemes have already been dealt with in Chapter VII, but it may be as well to recapitulate them briefly here.

In shipbuilding, the National Shipbuilders' Security Ltd. was registered in 1930,

to assist the shipbuilding industry by the purchase of redundant and/or obsolete shipyards, the dismantling and disposal of the contents, and the re-sale of the sites under restrictions against their further use for shipbuilding.

It succeeded in the first few years of its existence in buying up and closing down 100 shipyard berths, and according to the 1937 report the good work is still continuing.

In the woollen industry, the Woolcombers' Mutual Association Ltd. was formed early in 1933,

to assist the woolcombing industry by the purchase and dismantling of redundant and obsolete mills, plant and machinery for re-sale under restrictive covenants against their further use for woolcombing.

In the cotton industry, the Spindles Board, set up under the Cotton Spinning Industry Act in 1936, was empowered to scrap 10 million spindles. In its second annual report, issued in November 1938, it announced that already over $4\frac{1}{2}$ million spindles had been dismantled.

(2) *International Restriction Schemes*

We may next consider some of the restriction schemes that have been operated in recent years. These schemes, though not so openly and blatantly wasteful as the measures of actual destruction (since they destroy potential rather than actual production) are really just as harmful to the community as a whole. In fact in some ways they are more harmful, since by concealing the real waste of productive resources for which they

are responsible they tend to preserve the ordinary person from a true realization of the situation and hence to prevent him from demanding any action to alter it.

Most of the world's important foodstuffs and raw materials have been the subject of restriction schemes during recent years, and many still are. In the case of wheat, for example, an International Wheat Agreement was signed in August 1933, under which the wheat exporting countries agreed to limit their exports during 1933-4 and to reduce their acreage for the 1934 crop by 15 per cent, in return for which the importing countries agreed not to increase their acreage under wheat. In the United States wheat acreage was drastically reduced, while the Argentine and Australia both agreed that "in lieu of reducing acreage they will dispose of any surplus in the present season above their allotted exports by feeding wheat to live stock and similar uses, so as to prevent a rise in carry-over." (Report in the *Annalist*, September 8th, 1933.)

In the case of tea an international restriction scheme has been operating since 1933.

The International Tea Restriction Committee consists of representatives of the British and Dutch Governments, with statutory powers; its task is to fix a tea export quota for India, Ceylon and Dutch East Indies growers, above which they are legally forbidden to export. The quota is calculated according to estimates of "world absorption," and has varied between $82\frac{1}{2}$ per cent and $92\frac{1}{2}$ per cent of the Standard Export of just over 800 million lbs. In 1937 it was estimated that potential production exceeded current consumption by no less than 350 million lbs.¹ (equal to about two-fifths of the amount actually consumed in 1937).

A restriction scheme for sugar was organized under the "Chadbourn Plan" in 1931, under which the signatory countries agreed to restrict their exports. As a result these countries curtailed production to half the 1929 level, while Cuban production fell to only two-fifths of this level. The plan succeeded in reducing the large accumulation of disposable stocks but it failed to raise prices on the world market, partly

¹ The *Economist*, September 4th, 1937.

owing to the falling off in demand due to the slump, and partly to the development of domestic production, by means of subsidies and tariffs, in the chief importing countries, particularly in India. The plan was therefore allowed to expire in 1935; but by this time Javanese production had fallen to approximately half a million tons as compared with a production of nearly 3 million tons in 1930, while that of the European members of the scheme had fallen to just over half their 1929 output.

The main cause of the piling up of world stocks of sugar was the great increase in the production of cane-sugar since the war. According to a report published in 1931 by the League of Nations, cane-sugar "had passed through a technical revolution and had reduced costs during the whole post-war period. This progress was particularly rapid in Java, largely owing to improved varieties. The annual yield per hectare in 1928-9 was almost twice as high as in 1919-21. On the other hand, the cost of production of European beet-sugar was higher than before the war. Average costs were certainly much higher than the free market price in 1928-9, and production was maintained and increased only through import duties and bounties. Competent authorities agree that very little beet-sugar would be produced had it to be sold at world-market prices as they were in 1929."¹ Sugar, in other words, is an example *par excellence* of the increasing inability of a capitalist economy to pass on to the consumer the plenty made possible by technical progress. The only reaction is to try to recreate artificially the profitable conditions of scarcity.

Mr. J. W. F. Rowe, writing at the end of 1935, has graphically described the position as it existed at the expiry of the Chadbourne agreement:²

The position in 1935 has become almost incredible. The price of raw sugar at British ports is round about 4s. 6d. per cwt.: home-grown sugar in Great Britain receives a total assistance by the combined effect of the tariff and the subsidy of just under 12s. per cwt.; so that it costs British consumers nearly three times as much to grow their own sugar as they might buy it for. Colonial and Dominion

¹ *The Course and Phases of the World Economic Depression*, p. 52.

² *Markets and Men*, by J. W. F. Rowe, pp. 86-90.

sugars receive preferential tariff rates which are rather complicated, but one may say very broadly that on the average they receive a preference of nearly 100 per cent, i.e. Colonial and Dominion sugar costs Great Britain twice as much as if bought in the world market.

A similar state of affairs existed in the United States and the Dominions of South Africa and Australia. Mr. Rowe continues:

The result of this determination to be self-sufficient in sugar supplies, combined with the effect on consumption of artificially high prices in a time of world depression, is that little more than one-quarter as much sugar is now required from Cuba and Java. Their industries are virtually ruined, while consumers the world over are paying enormously more for their sugar than they need. Of course, neither Cuba nor Java can produce profitably at the present price, but they are easily the world's cheapest producers, and in a sense it is because of their low costs that they have been ruined. And it must be realized that Cuba at least could probably produce double its present record production. There is still plenty of new fertile land, and Cuba could certainly supply the United States, Great Britain and a large slice of Europe at a cost far below the cost of home production in these countries. Similarly, Java could supply British India, Malaya and so on. Cuba, Java and some of the other very cheap cane-sugar producing countries, could together supply the whole world at prices far below the cost of production of most of the sugar being made to-day.

Early in 1937 another attempt was made to regulate world sugar production. An International Sugar Conference was held in London at which the Governments of the various sugar producing countries were represented. The results of the Conference were summarized in the *Economist*¹ as follows:

The contracting governments agree, roughly speaking, not to increase their already grossly excessive measures of protection during the five years, from September next, for which the agreement is to run. Great Britain, however, reserves the right to increase domestic production and imports from the Empire in proportion to any increase in consumption. . . . The remainder of the agreement provides for the detailed apportionment of export quotas to the

¹ The *Economist*, May 29th, 1937.

free market and for the setting up of the International Sugar Council [to administer the quotas, etc.].

The free market, incidentally, had been so whittled down by the protective measures of the various Governments, that it supplied only one-tenth of total consumption, the remaining nine-tenths being taken, in the words of the *Statist*,¹ "from supplies produced or sold in conditions of political privilege." The *Statist* comments on the new agreement that "at the outset, restriction is invoked as an antidote to existing restrictions," while the *Economist* states that "it seems unlikely that it will bring with it any relief to the consumer";² but, in the words of the London and Cambridge Economic Service memorandum already quoted, "the point of view of the consumer of sugar has long ceased to count!"³

Restriction in the case of copper has had a distinctly chequered career. The failure of the American export combine—Copper Exporters Inc.—to hold prices up in 1931-2 was followed in January 1932 by an agreement among the producers of 90 per cent of the world's output to restrict production to 26 per cent of capacity (and in April to 20 per cent). This agreement broke down in 1933. After that, output increased fairly rapidly, particularly in Rhodesia, and in 1935 another restriction scheme was signed between the producers in Chile, Rhodesia, and the Belgian Congo, under which output was cut to 70 per cent of the current level (itself considerably below the 1929 level).

This quota was maintained until August 1936, when, as a result of the world-wide rush to buy commodities following on the depreciation of the franc, coupled with the increasing demand for rearmament purposes, copper prices soared upwards and the quota was raised by successive stages to 105 per cent in November. Restriction was dropped altogether in January 1937, only to be reimposed in October, and, according to the London and Cambridge Economic Service memorandum,

¹ The *Statist*, May 15th, 1937.

² The *Economist*, May 29th, 1937.

³ Special Memorandum No. 45 on "Stocks of Staple Commodities," p. 29.

"The long-term prospect is that restriction will have to be progressively tightened to prevent prices falling lower than the producers wish."¹

The production of spelter (zinc) was regulated for several years by various Cartel agreements, the most recent of which lasted from 1931 to 1934. According to Sir Robert Horne, in his chairman's speech to the shareholders of the Imperial Smelting Corporation in 1933:²

The International Zinc Cartel . . . established in 1931, has done very good service. At the inception of the Cartel a general remedy was applied to the general disease of over-production and increasing stocks, the results were very satisfactory. By the end of August 1933, stocks outside the U.S.A. had been reduced by 35 per cent.

World production in 1932 had fallen to just over half the 1929 figure, but actually the greater part of this was accounted for by the United States, where production fell to one-third. Since 1934 production has been uncontrolled, although some attempts were made during 1935 and 1936 to reconstitute the Cartel.³

For tin an International Restriction Agreement was reached in 1931, under which production in Malaya, the Dutch East Indies, Bolivia, Nigeria and Siam was compulsorily controlled. As a result, production was restricted by July 1932 to one-third of the 1929 output, and was maintained at that level until the beginning of 1934 when it was increased to 40 per cent. According to the *Statist*,⁴

The tin pools [which were formed to buy up and "freeze" excess stocks] have powerful financial backing, and since the whole scheme of restriction and sales by quota has received the blessing of the Governments concerned, it is obviously extremely difficult for consumers to organize any kind of opposition."

¹ Op. cit., p. 12. The latest figure (March 1939) is 90 per cent.

² Reported in the *Times*, November 18th, 1933.

³ In May 1939 the British Government adopted the proposals of the British and Empire producers for an increase in the import duty and a reconstitution of the Cartel. The increase in duty met with considerable antagonism as being in effect a subsidy to one company—the Imperial Smelting Corporation.

⁴ The *Statist*, May 13th, 1933.

It goes on to comment that :

The suggestion has been made that the whole scheme is being operated more in favour of the members of the pools than of the producers, and certain recent developments rather lend colour to this view.

The agreement was renewed in 1934, when the Belgian Congo, Indo-China and Portugal joined the scheme. Quotas started off at 40 per cent of standard tonnages (which were based on 1929 output) and were gradually raised during the following three years to 105 per cent at the end of 1936. At the beginning of 1937 the restriction scheme was once more renewed for five years, and the agreement ratified by the Governments concerned. The quota (based on revised and slightly higher standard tonnages) was raised to 110 per cent, but in December 1937, as a result of the heavy fall in prices, it was suddenly slashed to 70 per cent and has since been successively reduced to 40 per cent for the second quarter of 1939.

There have been two Government attempts to restrict the production of rubber. The first, the British Government's famous "Stevenson Scheme", lasted from 1922 to 1928 and covered British Malaya and Ceylon. Under this scheme production was regulated by means of a sliding scale based on the price of rubber. Restriction started at 60 per cent of the estimated productive capacity, but was tightened in 1924 to 50 per cent. This succeeded at first in forcing the price of rubber up to fantastic heights, but the effect was to produce such a large increase in the output of producers in areas outside the scheme that the price came tumbling down again, and eventually in 1928 the British Government was forced to abandon the whole scheme.

The British Government burnt its fingers too badly over the Stevenson scheme to try restriction again in a hurry, and it was not until April 1934 that a second scheme was agreed to, although discussions on restriction had taken place at intervals during the intervening period. The new scheme, unlike the earlier one, was an inter-governmental agreement and covered all the important producers of rubber. An International Rubber

Regulation Committee was set up, consisting of representatives appointed by the governments concerned, and export quotas were fixed for the signatory countries. The Committee gradually reduced the percentage of the basic quotas that it was permissible to export from 100 per cent to 60 per cent for the last quarter of 1935. After that the percentage was gradually raised again to 90 per cent for the second half of 1937, but by July 1938 it had once more been reduced to 45 per cent. At the beginning of 1939 it was again raised to 50 per cent.

It is clear from the foregoing description that many of the world's important raw materials have been subject to some form of restriction or destruction, and that in a considerable number of cases this has been carried through under the auspices of the Governments concerned. The policy underlying this wholesale restriction and destruction was admirably summed up by Mr. J. S. Haskell, Chairman of the Eastern Bank, in the following words:

If throughout the world, the acreage of wheat, cotton, sugar and rubber (British and Dutch) were decreased, if there were less drilling for oil, if subsidies for shipping were ruthlessly cut down, and steps to curtail production in other directions were taken, there would be every prospect of an advance in prices and a consequent trade revival.¹

This finishes our examination of international restriction schemes, which we may note have been almost entirely concerned with raw materials. The drastic nature of the restrictions imposed, coupled with the fact that most of these schemes, though started in the slump, were continued right throughout the subsequent recovery, shows that in a properly organized world there need be no fear that the expansion of production in this country would be held up by any shortage of raw materials. It is clear that the producers of these commodities have had the utmost difficulty in disposing of all their output, and that they would be only too glad to find an assured market for part of it. There can be little doubt that any country prepared to guarantee such a market over a period of years, pay-

¹ Reported in the *Statist*, April 1st, 1933.

ment to be made in the form of the country's manufactured goods, would be able to arrange such an exchange on very favourable terms. This involves, however, planned international trade, a subject which must be left for discussion in the next chapter.

(3) *Restriction in British Industry*

We may next turn to a consideration of the more important of the restrictive devices that have been adopted in this country since the onset of the world slump in 1929.

In November 1931, the Abnormal Importations Act was passed, which put duties varying from 50 per cent to 100 per cent on over a hundred articles. This was followed in February 1932 by the Import Duties Act, which put a tariff of 10 per cent (later raised to 20 per cent), on foreign imports of manufactured and semi-manufactured goods. Food was not taxed under this Act; this came later in the year after the Ottawa Conference, when food tariffs were imposed as part of the bargain with the Dominions and also to help the British farmer.

Food was taxed under the Wheat Act of 1932 which imposed a levy on all flour milled so as to subsidize home-grown wheat. In 1932 also duties on foreign imports were imposed of 15s. per cwt. on butter, 4s. 6d. per cwt. on apples, 1s. to 1s. 9d. per 120 on eggs, and 5s. to 6s. per cwt. on condensed milk.

Restrictive devices were not confined to the imposition of tariffs. The coal and iron and steel industries also received individual attention.

Restriction in the coal industry was imposed by the Coal Mines Act of 1930. Part I of this Act established the necessary machinery for limiting production by fixing quotas (both for districts and for separate undertakings) and minimum prices for each class of coal.

Under an amendment to the 1930 Act, passed in 1935 to prevent district cut-throat competition, each area and individual undertaking was allotted a maximum output, together with separate home and export sale quotas; provision was also made for the inter-district co-ordination of minimum prices.

The 1930 Act has not proved satisfactory even in regard to quotas, minimum prices, etc. The Committee appointed under the Act to make recommendations with a view to the better working of the schemes for the regulation of output and prices, reported in 1935 a disregard of the minimum prices and many other abuses.

Under Part II of the Act, the Coal Mines Reorganization Commission was created to deal with the long-term reorganization problems of the industry and to induce owners to prepare schemes for voluntary amalgamations. The latter encountered much opposition, and between 1930 and 1936 few voluntary and no compulsory amalgamation schemes were effected.

In their final report issued in February 1936 the Commission declared that they had made "an insignificant contribution to the problem of reorganizing the industry."

The Commission stated that they were "practically at a standstill" after a test case before the Railway and Canal Commission had rejected a scheme for partial amalgamation of coal concerns in West Yorkshire. At this point (July 28th, 1935) the Secretary for Mines stepped in and asked them "to refrain from initiating fresh inquiries in regard to possible amalgamations pending consideration by the Government of the whole position and power of the Commission."

The next step was the Government's Coal Bill of 1936, designed to secure compulsory amalgamations, which was withdrawn after furious opposition by the coalowners. Another Bill was introduced and was finally passed in 1938 with the compulsory amalgamations clauses rendered practically ineffective, again as a result of the coalowners' opposition.

It may be asked why it is that if the whole trend of our present economy is towards monopoly, the coalowners should so strenuously oppose amalgamation. The answer is that they are not opposed to *voluntary*, but only to *compulsory* amalgamations, as is clearly shown by the following quotation from a book by Mr. J. P. Dickie, who represented a mining constituency as a Conservative from 1931 to 1935:

The owners had no objection to amalgamation in suitable cases, but held that where it was necessary or desirable voluntary agree-

ment would bring it about, as in other industries, and they objected most strongly to having anything in the way of amalgamation forced upon them."¹

In the iron and steel industry a temporary $33\frac{1}{3}$ per cent tariff on imports of pig iron and semi-finished steel was imposed in 1932 on the understanding that the industry should reorganize and rationalize itself. In announcing this temporary tariff, Sir George May, Chairman of the Import Duties Advisory Committee, said: "A permanent tariff will be recommended, provided industry does its part. . . . The main value of a tariff, therefore, will be to afford the industry an opportunity of putting itself in order." The temporary tariff was subject to revision every three months, but the industry promptly pointed out that they could not do anything while the tariff was "temporary," so the Government obediently made it permanent for two years to October 1934. As a result, the British Iron and Steel Federation was set up in April, 1934, "to obtain the affiliation of associations, to promote the maximum of efficiency throughout the industry; to develop the export trade in iron and steel products."

The new Federation consisted of representatives of the steel manufacturers with an independent chairman, but it had no compulsory powers and in particular no powers to enforce technical reorganization, and yet in June 1934 the import duties were prolonged without limit. Immediately the industry began to clamour for an increase in the tariff to 50 per cent. This, however, was refused and the Government urged instead that the industry should make an arrangement with the International Steel Cartel for a quantitative limitation of imports. Negotiations were entered into with the Cartel but broke down, and the Government thereupon suddenly raised the duties. Almost immediately the Cartel agreed to limit imports into Britain to the 1933 level, which was the lowest level reached since the war, and the extra duties were thereupon removed. Later a permanent agreement was fixed up under which imports were to be still further reduced; but the demand for steel

¹ *The Coal Problem*, by J. P. Dickie, p. 149.

expanded so rapidly as a result of trade recovery and rearmament that the British manufacturers found themselves unable to cope with it and the import quota had to be increased. Subsequently the shortage became so acute that pig iron was admitted duty free and the duty on certain iron and steel products was reduced, but in 1938 they were reimposed.

The way in which the industry has been helped by the Government is well summed up in the following quotation from the *Economist* of July 25th, 1936:

Of all industries iron and steel has been most favoured by Government policy during the last three years. Heavy protective tariffs (used both to safeguard the home industry and to stimulate foreign producers into making agreements favourable to Britain), the stimulus given by easy money to the construction industries, the Government-guaranteed loans to railway re-equipment and finally rearmament—all have contributed to the industry's unprecedented prosperity. All output records have been broken, . . . profits have increased in proportion, and share prices have steadily advanced to levels which would have been thought fantastic three years ago.

The way in which the Federation has used its monopoly powers to put the interests of its own members before those of the community is well illustrated in the case of the Jarrow scheme. This was a scheme to establish a basic Bessemer steel works at Jarrow which would at the same time provide a supply of cheap steel and do something to solve the unemployment problem in Jarrow. It was a scheme which was backed by the Government and initially by the Federation, but, in the words of the *Economist*:

The north-east coast firms, however, who were being offered this source of cheap steel at their doors, were very far from enthusiastic. If there was to be increased production on the north-east coast they had plant and sites to offer. It is true that they could not produce Bessemer steel, that the plant was antiquated, and the sites less favourable, but both plant and sites were blessed by belonging to firms already members of the Federation.¹

On the excuse that an immediate increase in output was

¹ The *Economist*, July 18th, 1936.

necessary to meet the demand for rearmament and that the Jarrow plant would take too long to construct, the Federation decided it was not prepared to extend its co-operation, and the scheme fell through because, to quote the *Economist* once more, "In present circumstances, the mere withholding of its approval was an absolute veto," since,

The British Iron and Steel Federation—through its agreements with the international cartel, through its apparently close relations with the authorities who determine the degree of tariff protection and through the almost unique power about to be conferred on it of importing supplies of raw material at a specially low rate of duty and distributing them to its members—has almost complete control of imports, exports and production of iron and steel in this country.

The *Economist* finally comments on the whole affair:

The Jarrow scheme was not intended to be competitive with, so much as complementary to, the existing industry, a contribution to that technical renovation of the industry that has so long been promised. The Federation, on the other hand, has received unusual favours at the hands of the State and might be expected to have obligations in return. But neither the soundness of the scheme nor the obligations of the Federation availed one whit. The scheme was turned down flatly and the obligations were defaulted. And why? Because the Tees-side firms had interests which they "could not see their way to sacrifice." . . . The plain fact is that if an industry is elevated to a monopoly and placed in charge of those who own it, it will act as a private monopoly always acts. It will refuse entry to newcomers, however irreproachable their case. It will put its own interests above those of anybody else, even of the community as a whole. It will exploit the market for all it is worth. If the monopolistic powers are exercised by a central body elected by individual producers, none of whom has individual responsibility for the action of the whole, the case is worse. For the central body will have the conscience, while the individual members have the power. London may wish to pay some attention to the public interest, but Tees-side will crack the whip. . . . Of the insured workers of Jarrow, 70 per cent are still unemployed.

(4) *The Agricultural Marketing Schemes*

We may next consider the complex system of agricultural marketing schemes that the Government has set up in recent years.

This system is based on three Acts of Parliament, and regulations issued in accordance with the provisions of those Acts. The inauguration of the system is due to the Labour Government's Agricultural Marketing Act of 1931: its developments to the National Government's two Agricultural Marketing Acts of 1933, combined with the imposition of tariff and import quotas.

The object of the system is to improve the position of producers by raising the prices of agricultural commodities, but the benefits of the schemes have been extended in some cases (notably bacon and milk) to distributors. There is in the Acts some mention of a hope that the industries concerned will take some steps to make themselves efficient. For the most part, these hopes have remained hopes, and, as the *Economist* has pointed out, the import restrictions that were offered "as a bribe to do something which the nation is entitled to require its agriculturists to do in any case . . . remain, but the counterpart has not been forthcoming."¹

(a) *Hops*. The Hops Marketing Board, which was the first to be set up, began to operate in September 1932. The Board has a monopoly of the sale of hops, and all hops grown must be handed over to it. It allots quotas to individual producers, and as these quotas are allotted on the basis of their average production in 1928-32, a monopoly for existing producers has been established. In 1933-4, the Board secured a price almost double that of its first year of operation. The brewers, who are the Board's sole customers, agreed to a standard price for the next five years and also agreed to take at least two-thirds of their requirements from the Board. Any surplus unsold was to be bought by a permanent joint committee (appointed by the Brewer's Society and the Board) out of the proceeds of a levy

¹ The *Economist*, August 11th, 1934.

of 10s. per cwt. on all hops sold by the Board. One immediate effect of the establishment of the monopoly was that a trade in production quotas rapidly grew up, so that "producers" were being paid not to produce hops.

(b) *Potatoes.* The Potato Marketing Board was set up in December 1933. It consists of twenty-nine members elected by the producers and two members co-opted after consultation with the Government's Market Supply Committee. It allotted acreage quotas to registered producers and a fine of £5 per acre is imposed on any new producer or on any producer exceeding his quota. As the crop is highly variable, and demand is inelastic, the Board attempts to smooth out price fluctuations by controlling the supply. This is done by fixing a minimum size below which potatoes may not be sold. Those ineligible for sale are weeded out by passing the potatoes through a riddle or sieve, the size of which is varied according to the estimated needs of the market.

For example, in December 1937 the Board found that stocks were about 250,000 tons higher than a year previously. It therefore imposed more stringent riddle regulations, and in addition it took steps to buy and store potatoes where necessary.

The net effect of the scheme has been a restriction both of output and of acreage, as is evident from the following figures:

TABLE XXII
Output of Potatoes

			Production ('000 cwts.)	Acreage ('000 acres)
1933	...	...	110,080	810
1937	...	...	98,320	716

In addition to home production, imports are also restricted. They are prohibited except under licence from the Board of Trade, and each year an import quota is fixed and the requisite licences issued to importers. The result has been a very drastic curtailment of imports, as the following figures show:

TABLE XXIII
Potato Imports ('000 cwts.)

	1931-2	1936-7
Maincrop potatoes	15,868	2,531
	1932	1937
Early potatoes ...	6,369	2,477

(c) *Bacon*. Three Boards have been set up to deal with the bacon industry, their declared object being to expand the home industry by putting farmers' and curers' prices on a profitable basis. The Pigs Marketing Board represents the farmers and the Bacon Marketing Board the curers (almost entirely the big private firms), while the Bacon Development Board, which now controls the other two, consists of four from each of the other Boards, with five representatives appointed by the Minister of Agriculture, one of whom is the chairman, Lord Portal.

The pig producers contract with the bacon factories for the quantity of pigs to be delivered during the year and the price is fixed by negotiation between the Boards. The total national consumption was assumed to be stabilized at 10,670,000 cwts. per annum (imports alone were greater than this in 1931 and 1932), and imports are restricted to the difference between this figure and the amount contracted for at home. In effect, the working of the Boards has resulted in the domination of the pig industry by the curers and particularly by the big curers: they are the only customers for bacon pigs, are a small body, and have used the powers granted to them to obtain better terms than they have previously had, without any reduction in retail prices. Among the minor complications are the freight charges, which are fixed at a flat rate paid to the railways for every pig carried, irrespective of distance. As in the main the small curers are near distributing centres, while the large curers are at some distance, this amounts to a levy on the smaller for the benefit of the larger curers.

The "stabilization" from 1933 of bacon supplies by import

restriction at about 10,670,000 cwts. represented a reduction from about 13 million cwts. consumed the previous year (a peak for bacon consumption) and was carried out in order to raise prices. As a result imports have fallen from 11½ million cwts. in 1932 to 7 million in 1937. This drastic method was adopted primarily because of the much lower curing costs in Denmark, where curing is done on a farmers' co-operative basis. The *Farmer and Stockbreeder* estimated in 1937 that Danish curing and marketing costs are about one-third of British costs. The Government's declared policy is to reduce costs by "rationalization" and by cutting down the number of factories; but despite repeated requests by the farmers and the Food Council, the Development Board up till 1938 had no power to inquire into these so-called "costs" to find out how much represents profit and how much necessary costs.¹ The biggest combines in the trade, such as Marsh and Baxter and its subsidiaries, are private family concerns which publish no accounts.

In actual fact, whether or not "costs" have been reduced, there is no doubt that retail prices have risen very considerably. The price of streaky bacon in 1938 was 1s. 3¼d. per lb., as compared with 10d. per lb. in 1932, which represents an increase of 50 per cent over the pre-scheme price! (We have seen in a previous chapter how the effect of the restriction on imports was to increase prices to such an extent that the Danish exporters were able to obtain the same amount of money for a considerably smaller quantity of bacon.) The *Grocer* summed up the position in its editorial of September 25th, 1937 as follows:

Because of general sympathy with home agriculture the public have borne the repeated advances in the retail price of bacon with remarkable patience, but as time goes on it becomes increasingly clear that farmers who are pig producers are not getting the benefit of the high price of bacon.

It would appear that the main effect to date of the Govern-

¹ The 1938 Bacon Industry Act gives the Board power to do this: how far it will use this power remains to be seen.

ment's policy of reducing costs has been to produce a phenomenal rise in prices! This, after all, is not really surprising since the method chosen to reduce costs has been to limit the number of bacon factories. The Bacon Development Board has instituted a system of licences to all curers; anyone desiring to start or extend a bacon factory must apply to the Board for a licence. Since 1938 the Board has had powers to close down redundant or inefficient factories by refusing to renew their licences. Further, each curer is allotted a quota for bacon sales, which is fixed on the basis of their average 1933-5 production in the case of the smaller factories, but in the case of the larger factories production capacity is also taken into account.¹

The effect of these arrangements is likely to be to drive out as redundant the small curers (many of them butchers or farmers curing for a small local trade) and to stop the expansion of co-operative curing; so that the scheme is, in fact, an effective weapon of the big combines against their competitors. The argument used to justify the policy is that the insufficient supply of pigs for so many factories leads to low turnover in each, and therefore to high curing costs. The big curers, therefore, as the most economical, should be allowed to corner the whole supply of pigs and increase their own turnover—without the Government making any inquiry into their profits.

It is interesting to note that :

Farmers generally are not prepared to admit that curers on a large scale are necessarily the most efficient, for their experience shows that the small factories are prepared to pay as much for their pigs.²

The continual conflict between the farmers and the curers over the price that should be paid for pigs reached such a pitch that for two years the whole scheme broke down. As we have already seen, the marketing scheme requires registered farmers to contract with the curers to deliver a certain quantity of bacon pigs by a given date, the curers then supplying their remaining requirements on the open market. The 1937 contract

¹ This obviously benefits the large at the expense of the small curers.

² *Food Industries Weekly*, September 24th, 1937.

price for pigs, fixed by the Board, was so low that the farmers did not contract for sufficient pigs, preferring to sell on the open market; as a result the contract scheme broke down altogether and was not resumed until 1939. Pig production, which had risen sharply in consequence of the farmers' expectations of help from the scheme, subsequently declined, as the following figures show:

<i>Pig Population in June</i>		
1935	1936	1937
3,813,000	3,804,000	3,634,000

It is true that production of high quality pigs has risen: but this does not solve the problem of cheap bacon supplies for the workers, and the quota still remains in force.

During the period when the scheme had broken down the farmers were (according to the *Statist*, November 20th, 1937), getting better prices in the open market than those which would have been given under the scheme. In fact the curers had attempted, by their power on the Boards, to reduce prices to the point where it no longer paid the farmers to produce pigs. The result was inevitably a decline in production, and the quantity of bacon produced from home pigs fell from 2,320,000 cwt. in 1936 to 1,940,000 cwt. in 1938. Under the 1938 Bacon Act the farmers are guaranteed a remunerative price for bacon pigs for three years, and curers are guaranteed a fixed margin between the price of pigs and the price of bacon for the same period, both to be ensured by a subsidy which is estimated to work out at about £1 million a year.

The method is as follows:

Farmers are to receive 12s. 6d. per score for a pig, when the standard feed for a pig costs 8s. 6d. When the price of the standard feed goes up the *farmers* will receive compensation from the Exchequer. When the price of bacon falls below 94s. 6d. a cwt., *curers* on the other hand will be compensated.

This Act, while it gives some security to farmers, encourages feeding stuff suppliers to raise their prices, since they know that the money to pay them will be forthcoming. It also provides a subsidy to curers out of the taxpayer's pocket, without

any inquiry into the necessity for it. (As we have already seen, the big curers are private companies publishing no accounts.) In the end, therefore, a large part of this subsidy is likely to go into the pockets of the curers and the suppliers of feeding stuffs.

The leading suppliers of feeding stuffs are the big millers, strongly organized in the Millers' Mutual Association, which indirectly exercises control over prices. The machinery is thus in existence through which the price of feeding stuffs may be adjusted to reap the fullest benefit for the millers under the new subsidy.

Farmers accepted the new Act as a concession to their interests, since it did offer some assurance that they would be able to cover their costs of production when feeding-stuff prices rose (although many of them were dissatisfied with the basic price allowed for pigs under the new Act). Shortly after the scheme began to operate, however, widespread complaints and protests were heard from the farmers. Not only were the prices paid 2s. a pig below those ruling on the open Irish market (according to delegates to the National Farmers' Union Conference in 1938) but grave hardship was reported arising from the power of the Board to direct a farmer to send his pigs to a curer other than the one he had specified. Farmers who were members of local co-operative curing factories were sometimes debarred from sending pigs to their own factories (thus creating serious difficulties for the latter). They had to send their pigs much longer distances by rail, with the result that the carcasses lost weight and the price payable was reduced. It was quite clear who benefited from the arrangement—the big private curers who had had difficulty in getting supplies of pigs at their price. But it was a sore blow to the co-operative curing business, which was giving the farmer a chance to eliminate the middleman, and which, if it were sufficiently developed, might be as successful in England as it has been in Denmark in producing good and cheap bacon.

It is clear from the foregoing description that the primary, if not the sole, object of the bacon scheme has been to raise prices by the creation of an artificial scarcity. It started off

with import restriction, passed on to the restriction of the number of curing factories, and has finished up (under the 1938 Act) with a good fat subsidy. Its effect has been to reduce consumption and to raise retail prices by over 50 per cent, so that no one can say it has failed in its primary object. Few people, in fact, will disagree with the sentiments expressed by the President of the National Federation of Meat Traders, as reported in the *Manchester Guardian* for September 22nd, 1936.

"The price of bacon to-day is prohibitive to thousands of the consuming public of Great Britain," declared Mr. Tom Wise, of Bristol, in his presidential address to the autumn meeting of the National Federation of Meat Traders Associations at Southport. Criticizing the bacon marketing schemes, he said that the trade had passed largely into the hands of monopolistic interests, and conditions were anything but what they should be. . . . "To-day the poorer people cannot buy half the quantity that they would. At the same time the importer is getting the amount of profit on one pig that he was originally getting on three." The costly buildings which had been erected and the expensive staffs which had been installed up and down the country had added to the cost of bacon. "We say it has not produced more pigs. There are 20,000 fewer sows in this country than there were previously, and consequently we cannot produce more pigs. The whole thing has been a failure."

It has certainly been a failure from the consumer's point of view (for whom it never pretended to cater) and to some extent even from that of the farmers. But has it been a failure from the point of view of the curers? One may perhaps be permitted to doubt it!

(d) *Milk*. The milk market has not been a free one since the war. From 1922 onwards the Permanent Joint Milk Council met every year to fix prices for milk sold for liquid consumption. This body was voluntary, and consisted of representatives of the producers (i.e. the farmers), distributors, and of those who used milk for manufacture, e.g. for butter, cheese, chocolate, etc. Its object was to fix milk prices and conditions of sale, and to apportion the losses made on milk sold for manufacturing purposes. The monopoly-hunters were not, however, strong enough to command the industry as they wished, agreements

were never universally enforced, and by 1932 this attempt to organize the industry was generally recognized to have failed.

This attempt to exploit the consumers having led to chaos, the National Government stepped in to see if it could not make a better job of it by coercion. As a result the Milk Marketing Board came into operation in October 1933.¹ This is composed of seventeen members. There are twelve farmers' representatives, three special members elected at the annual meeting, and two co-opted members appointed by the Market Supply Committee. There are no representatives of the consuming public, whose interests are supposed to be protected by the Food Council—a non-elective and purely advisory body.

No producer can sell milk unless registered by the Board and he must sell in accordance with conditions prescribed by the Board. With trifling exceptions all milk produced is sold through the Board, which is empowered to fix prices at which liquid milk may be sold wholesale, minimum retail prices, and distributors' profit margins. It also negotiates the prices of the milk sold for manufacturing purposes and so it determines the prices which the farmers get for their products. The procedure is as follows:

Each year the Board fixes the wholesale price for liquid milk, decides on the distributors' profit margin after consultation with the Central Milk Distributive Committee,² and so fixes the minimum retail price at which milk is to be sold to the consumers.

The consumers buy as much milk as they can afford at the retail price fixed by the Board, and the surplus is sold to manufacturers below cost price. In fact when fixing the minimum retail price the Board deliberately fixes it sufficiently high (that is, it deliberately limits consumption), so as to cause surplus milk to be left over after the retail demand has been exhausted. The surplus is sold by the Board, at much lower

¹ This refers to the Board for England and Wales. Scotland has three separate Boards, but all four Boards are organized and run on the same principles.

² This body represents the distributors.

prices, to manufacturers of such things as butter, cheese, chocolate and umbrella handles.

When this double process of disposing of the milk for ordinary consumption and for manufacturing purposes is complete, the Board is then in a position to determine the price it can pay to the farmers for the milk they have produced. Liquid milk is sold at one price, the wholesale price fixed by the Board, and milk for manufacture is sold at another price, arrived at after negotiation between the manufacturers and the Board. The average of these two sets of prices is struck monthly, and it is this "pool" price which is paid to the farmer by the Board.

It has been necessary to go in some detail into the mechanism of the Milk Scheme and its relation to the four interested parties—the farmers, the distributors, the consumers and those using milk for manufacture. Unless this is clearly understood it is difficult to appreciate the really staggering way in which the consumers are exploited through the operation of the Scheme.

It may justly be argued that the whole effect of the Government's milk policy since 1933 has been the exploitation of the consumers and of the small farmers in the interest of the manufacturers and the big distributors; that its policy has consistently been one of making the poor pay, and that the working-class housewife and the small farmer producing for a local market are both being exploited in order that a handful of milk combines and manufacturers may prosper.

These are undoubtedly extremely serious charges to make. What is the evidence for them?

First, the charge that the public, buying liquid milk, is being deliberately exploited in the interest of those buying milk for manufacture.

This charge received support in the Report made in 1936 by the Milk Reorganization Commission for Great Britain. This Government-appointed Committee stated that:

So far as consumers are concerned, the principal effect of the schemes has been to raise retail prices throughout most of the country. . . . The present price of liquid milk to the consumer is raised above what might be called its "natural" level by reason of

the subsidization of the returns from milk sold for manufacture out of the returns from the liquid market. . . . It would not have been necessary to raise liquid milk prices to their present level but for the loss on the surplus [sold to manufacturers].¹

The following table shows the course of the wholesale price of liquid milk. Prior to 1933 this price was arrived at by negotiation between farmers and distributors; since that date it has been fixed by the Board:

TABLE XXIV

	Wholesale Price Per Gallon	Manufacturing Price per Gallon (average of monthly prices)
1922-3	16d.	9½d.
1927-8	14¼d.	7½d.
1932-3	14d.	5d.
1933-4	14d.	5d.
1934-5	15½d.	4¾d.
1935-6	15¼d.	5d.
1936-7	15¼d.	5¾d.
1937-8	16¼d.	6¾d.
1938-9	16¼d.	—

Since 1932-3 the wholesale price of liquid milk has risen by 16 per cent and is now above the level of 1922-23.

As the *Statist* points out "These figures refer to prices paid by buyers for milk for re-sale to the public. The course of prices for "manufacturing" milk has not been quite the same."²

Not quite the same indeed! The table also shows the figures of manufacturing milk prices, as fixed (since 1933) by negotiation between the Board and the manufacturers.

The wholesale price for liquid milk is now back to the 1922 level, while that of milk for manufacture is only about two-thirds of the 1922 price. The Scheme keeps up the price the consumer pays for his milk so that large manufacturers such as United Dairies, Ltd., with its forty condensaries and creameries,

¹ Report, pp. 119 and 195-6.

² The *Statist*, November 27th, 1937.

or Rowntree & Co., Ltd., and Cadbury Brothers, Ltd., with their chocolate and confectionery works, can obtain their raw material at a lower price.

Sales of manufacturing milk, at a loss, have risen considerably faster since 1933-4 than sales of liquid milk. Since the increased loss on the former can only be met by raising the price of liquid milk, this development has directly helped to increase liquid milk prices. In other words, the more milk is produced, the higher the price!

This policy is deliberate. In 1936 the Milk Reorganization Commission stated that "It is evident that price is an important factor in limiting the consumption of liquid milk in this country,"¹ and again:

In view of the special importance of milk to families with young children, it seems particularly undesirable that the price of liquid milk should bear any additional charge in respect of surplus manufacturing milk.²

Unfortunately the Government has so far shown no signs of recognizing the truth of these statements; the Board could hardly be expected to.

The big manufacturers receive further assistance from the quantitative restriction of imports of condensed and processed milk, under which the imports of sweetened skimmed condensed milk (the principal article concerned) have dropped from 2,100,000 cwts. in 1932 to 1,200,000 cwts. in 1938, thus enabling United Dairies and others to expand their processing business. In his 1934 report the chairman of United Dairies, Mr. J. H. Maggs, said: "Encouraged by the practical steps taken by Mr. Elliott to restrict imports of foreign processed milk, we have greatly increased our manufacturing plants." This quantitative restriction is in addition to the tariff of 15s. per cwt. on butter, 15 per cent on cheese, and 6s. per cwt. on condensed milk.

The second accusation is that the Board, having fixed wholesale liquid prices, fixes retail prices at too high a level, and that

¹ Report, p. 194.

² Ibid., p. 196.

THE GROWTH OF MONOPOLIES

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this is done in the interest of the big distributing middlemen like United Dairies, Ltd., and the Express Dairy Co., Ltd.

The power of the Board to fix wholesale prices for milk, coupled with its power to fix the retail price, gives it full control over the profit margins obtained by the distributors. This control has been exercised with the object of maintaining distributors' profits. This is proved by the figures of the average prices per gallon for each of the years since the Board began operating.

TABLE XXV¹

	<i>Wholesale Price</i>	<i>Retail Price</i>	<i>Distributors' Profit</i>
	<i>d.</i>	<i>d.</i>	<i>d.</i>
1933-4	14.01	24.83	10.82
1934-5	15.09	26.08	10.99
1935-6	15.26	26.21	10.95
1936-7	15.26	26.21	10.95
1937-8	16.26	27.48	11.22

Thus while wholesale prices have risen by $2\frac{1}{4}d.$ since 1933, retail prices have risen by $2\frac{2}{3}d.$ Distributors' profit has thus risen by $\frac{2}{3}d.$ per gallon. Distributors now make about $11d.$ on every gallon, whilst the farmer only gets about $1s.$ ² Milk thus costs almost as much to distribute as it does to produce.

The distributors obtained from the Board an increase of one-third of a penny per gallon for their 1937-8 contract on the ground that costs were rising. This was too much even for *The Times*, which was moved to protest in a leading article that:

It has long been considered that the present ways of distributing milk are unnecessarily elaborate and expensive, an opinion which several commissions and committees have confirmed in recent years. But, so far as the public knows, the distributors have taken no steps to overhaul or co-ordinate the services they render to the public. No doubt they can show that their costs as well as those of producers have risen in some measure since the last annual contract, but it does seem unfortunate that the Milk Marketing Board, by allowing distributors an extra margin during the coming year, has post-

¹ *The Home Farmer*, January 1939, p. 10.

² This is the "pool" price, which is what the farmer actually receives.

ment's policy of reducing costs has been to produce a phenomenal rise in prices! This, after all, is not really surprising since the method chosen to reduce costs has been to limit the number of bacon factories. The Bacon Development Board has instituted a system of licences to all curers; anyone desiring to start or extend a bacon factory must apply to the Board for a licence. Since 1938 the Board has had powers to close down redundant or inefficient factories by refusing to renew their licences. Further, each curer is allotted a quota for bacon sales, which is fixed on the basis of their average 1933-5 production in the case of the smaller factories, but in the case of the larger factories production capacity is also taken into account.¹

The effect of these arrangements is likely to be to drive out as redundant the small curers (many of them butchers or farmers curing for a small local trade) and to stop the expansion of co-operative curing; so that the scheme is, in fact, an effective weapon of the big combines against their competitors. The argument used to justify the policy is that the insufficient supply of pigs for so many factories leads to low turnover in each, and therefore to high curing costs. The big curers, therefore, as the most economical, should be allowed to corner the whole supply of pigs and increase their own turnover—without the Government making any inquiry into their profits.

It is interesting to note that :

Farmers generally are not prepared to admit that curers on a large scale are necessarily the most efficient, for their experience shows that the small factories are prepared to pay as much for their pigs.²

The continual conflict between the farmers and the curers over the price that should be paid for pigs reached such a pitch that for two years the whole scheme broke down. As we have already seen, the marketing scheme requires registered farmers to contract with the curers to deliver a certain quantity of bacon pigs by a given date, the curers then supplying their remaining requirements on the open market. The 1937 contract

¹ This obviously benefits the large at the expense of the small curers.

² *Food Industries Weekly*, September 24th, 1937.

summer), from six months to eight months, and by the fact that the prohibition against selling below the Board's fixed price has been extended to forbidding the practice of selling milk at the farmhouse door more cheaply than on delivery. A number of farmers have been heavily fined by the Board for selling below its prices.

It must in fairness be pointed out that certain schemes have been initiated for the supply of cheap milk to certain sections of the community. These schemes, in spite of their comparatively limited scope, are undoubtedly welcome, but they can in no way be regarded as a substitute for the stimulation of consumption by a general lowering of prices. In 1934 the scheme for cheap milk in schools was introduced by the Board. Under this scheme school children can purchase milk at $\frac{1}{2}d.$ for one-third of a pint (or 1s. a gallon, about twice the average manufacturing price). One-half the "loss" is met by a direct Exchequer subsidy under the Milk Act of about £450,000 per annum. In addition, schemes have been started under the auspices of the Commissioner for the Special Areas at Rhondda, Jarrow and Newcastle, for the supply of milk to nursing mothers and children under school age at $2d.$ a pint. The Government's physical fitness schemes and the White Paper for the Milk Industry contained somewhat vague proposals for enabling other local authorities to extend the provision of milk when recommended by the Medical Officer of Health, but so far nothing has been done in this direction. Local health centres, etc., supplying milk do not at present receive special terms from the Board.

In conclusion, we cannot do better than quote the following commentary on the scheme, made on November 27th, 1936, by Sir Archibald Sinclair, leader of the Parliamentary Liberal Party:

If you want to sell milk to the manufacturer you can let him have it at $5d.$ or $6d.$ a gallon, but if you sell it at less than 2s. a gallon to a hospital or to a poor family . . . you are guilty of a criminal offence. 4,500,000 people live on a diet which is deficient in every constituent of nutritive value. This figure includes between one-third and one-quarter of all the children. Yet the Government are obsessed with

the notion that there is a glut of milk. They have set up a Marketing Board which makes milk plentiful, but which forbids it to be cheap.¹

(5) *Subsidies*

There is no marketing scheme for wheat, but the Wheat Act of 1932 provides for substantial subsidies to wheat growers. Under the Act "deficiency payments" are paid to the wheat growers equal to the difference between the price of home-grown wheat and a standard price of 10s. per cwt. The total amount of subsidy was originally limited to that payable on 27 million cwts. of wheat, so that if production exceeded this amount—as under the stimulus of the subsidies it soon did—the deficiency payments were to be reduced proportionately. In 1937, however, this amount was increased to 36 million cwts. The deficiency payments are financed by a levy on all flour milled, the cost of which is passed on to the consumer. Since the average price of wheat during the years 1932–7 has averaged round about 6s. 5d. per cwt. it is clear that the subsidy, payable directly by the consumer, has been equivalent to an addition of approximately 50 per cent on the price of all home produced wheat.

One of the effects of the subsidies given to the production of wheat has been to extend the acreage under wheat at the expense of that under oats and barley. Power was therefore taken under the Agriculture Act, 1937, to subsidize the production of these two crops also, and a subsidy was introduced early in 1939.

Perhaps the best known, and the most scandalous, of the subsidies is that on sugar beet. This subsidy was started in 1925 and was originally limited to ten years, but in 1934 it was extended for a further year and a committee under the chairmanship of Mr. Wilfrid Greene, K.C., was appointed to inquire into the advisability of future aid.

The findings of this committee were published in April 1935, and contained a strong majority report in uncompromising opposition to the continuance of the subsidy. It stated that:

¹ *Liberal Magazine*, December, 1936.

Since, however, on a review of all the facts put before us, we are unable to find positive justification for the expenditure of a sum of several millions per annum on an industry which has no reasonable prospects of ever becoming self-supporting, and on the production of a crop which, without that assistance, would at present sugar prices be practically valueless, we cannot recommend the continuance of assistance.¹

The Report² also sets out the financial results of the subsidy for the ten years 1925-34:

Of the total receipts from sugar and other products, £66,940,351, over 60 per cent (£40,292,077) was provided by State assistance. In spite of the fall in the rate of subsidy, this proportion has been fairly steady throughout the period owing to the parallel fall in the world price of sugar. . . . Over the whole period the total State assistance almost exactly equals the amounts paid for beet.

These subsidies were intended to assist in the development of beet sugar growing in Great Britain and thus to help agriculture and increase employment on the land. It is true that many small farmers have derived benefit from the subsidy and that it has given employment to many agricultural labourers. But, as will be seen from the following quotation from the *Economist* of February 8th, 1937, the lion's share has gone into the pockets of the big sugar refiners who established factories to handle the sugar beets:

Since 1924 the State has spent £50 million in supporting an industry whose total output is worth less than the subsidy received. During this period the profits, financed by the subsidy, have enabled the beet sugar companies to repay nearly 18½ per cent of their capital, to accumulate assets equal to nearly 27 per cent of their remaining capital, to write off about 42 per cent of their expenditure on fixed assets, and to pay gross dividends amounting to more than 83 per cent of the share capital outstanding.

The Greene Committee's condemnation was ignored and in 1936 the Sugar Industry (Reorganization) Act was passed.

¹ *Report of the United Kingdom Sugar Industry Inquiry Committee*, p. 102.

² *Ibid.*, p. 35.

Under this Act the fifteen existing sugar beet companies were amalgamated into the British Sugar Corporation Ltd. The subsidy is to be continued indefinitely at a rate commencing at approximately $\frac{1}{2}d.$ per lb. and subject to adjustment according to changes in the price of raw sugar and other variations in the "standard conditions" as laid down in the Act. The subsidy is intended to be sufficient to enable a dividend of 4 per cent to be paid on the Corporation's ordinary shares. In addition the shareholders are to be entitled to a part of any increase in profit resulting from increased efficiency as a result of the amalgamation, up to a total dividend of 7 per cent.

With their sugar taxed and their wheat "Quota'd," the British public could scarcely expect their meat to go free. We have seen in a previous chapter how the Government first attempted to limit the imports of frozen mutton, frozen beef and chilled beef—the staple meat diets of the working class. This restriction failed, however, to produce the necessary rise in prices, and in 1934 the Government granted a subsidy to British cattle farmers of roughly $1d.$ per lb. on beef sold for slaughter. The subsidy was intended to be a temporary one to last for six months while the Government was negotiating with the Dominions for a further drastic reduction of imports. The Dominions, however, would not agree to the necessary reduction, and the subsidy was renewed from time to time and in 1937 made permanent at a rate not exceeding £5 million per annum. At the same time the Government imposed duties on foreign supplies and also provided for a quantitative limitation of total imports.

The subsidies so far mentioned have been directed to the assistance of agriculture, even if in some cases the effect has been to help the middleman or the manufacturer as much as the farmer. Assistance to industry has mainly taken the form of tariffs and/or restriction schemes, but there are one or two industries that have managed to obtain direct subsidies. Apart from the housing subsidies which, although they have undoubtedly benefited private builders, must be considered as mainly benefiting the consumer rather than the producer, the most continuous industrial subsidy has been to civil aviation.

Imperial Airways Ltd. a company whose shares are privately owned, has received in subsidy over £5 million between 1924 and 1938, which has enabled it to pay dividends of around 6 per cent on its ordinary capital.¹

The recipient of the largest amounts of cash has been the coal-mining industry, which received a subsidy of £7 million in 1921 and of £23 million in 1925-6. The first of these was given to end a lock-out and the second to stave one off. Another industry to receive a subsidy was tramp shipping, which for 1935 was granted a subsidy of £2 million. This, originally for one year only, was continued in 1936; but in 1937 it was not renewed owing to the rise in shipping freights.

Mention must also be made of the Government's "Scrap and Build" Scheme, contained in Part II of the British Shipping (Assistance) Act of 1935. This did not provide for an outright subsidy, but it did empower the Board of Trade to make advances at low rates of interest (the rate was not to exceed 3 per cent per annum) to assist in building or modernizing cargo vessels. A condition for an advance was that two tons of shipping must be scrapped for every new ton built, and one ton for every ton modernized. This section of the Act expired at the beginning of 1937, by which time it had become unnecessary owing to the rapid rise in freight rates which had occurred in the meantime. The Report of the Ships Replacement Committee on the working of the scheme states that advances of just over £3½ million were made and that 97 vessels of a gross tonnage of just under 400,000 tons were scrapped as a result of it.

In addition to the direct subsidies mentioned above, both industry and agriculture have received very substantial indirect subsidies as a result of the Local Government Act of 1929, popularly known as the Derating Act. Under this Act agricultural land and buildings received total exemption from rates, while industry and transport received exemption to the extent of 75 per cent. In the case of the railways the exemption was made conditional on the relief being used to reduce freight

¹ It has now been announced (June 1939) that Imperial Airways and British Airways are to be transferred to a new public corporation,—British Overseas Airways Corporation.

rates, with the result that industry received a double benefit. The cost of the exemption is met by a grant to the local authorities from the National Exchequer. When the Act was passed the net cost was estimated at about £31 million, in addition to £3 million which was charged on the Road Fund. The indirect subsidy to industry and agriculture resulting from the Act is therefore about £34 million a year.

We have now examined some of the devices, both national and international, which have been adopted in order to maintain the profitability of production. We saw in the last chapter the difficulties that a capitalist system encounters as a result of the tendency for the profitability of production to fall as scarcity gives way to plenty (or rather, to *potential* plenty); and we suggested that the capitalists would attempt to meet these difficulties by trying to create an artificial scarcity to replace the previous natural scarcity. The devices that we have examined in this chapter, with the exception of subsidies which clearly directly increase profits, have all been directed in one way or another to the creation of artificial scarcity, either by restriction or destruction, by the exclusion of foreign competitors or by the creation of monopolies, or by a combination of all these methods. They are, in fact, the kind of devices that our theoretical analysis would lead us to expect, and they do to that extent provide concrete evidence of the correctness of that analysis.

It is not enough, however, to demonstrate the correctness of a piece of theoretical economic analysis. The purpose of this book has been to find out how many people are living in poverty and how far this poverty is preventable, and we found that most of the poverty is in fact preventable in the sense that the requisite productive resources are available if only we cared to use them. This led us on to the question of why the poverty nevertheless persisted and the productive resources remained unused, and we concluded that fundamentally it is due to the fact that production is carried on for private profit and not in order to provide the maximum consumption for the community as a whole. We have now to show that the poverty is also preventable in the sense that a society in which production is carried

on for the common good instead of for private profit is workable as well as desirable. We have, in fact, to sketch briefly the outlines of what has been aptly described as a system of "planned production for community consumption," and to this we must now turn.

CHAPTER X

PLANNED PRODUCTION FOR COMMUNITY CONSUMPTION

(1) *The Basic Principles of Socialist Planning*

WE have now reached the end of our investigation. We have estimated the needs that have to be satisfied if a reasonable standard of life is to be realized, and we have shown that the available evidence, though too scanty to be completely conclusive, does at any rate give strong support to the view that such a standard could be provided for every one if our productive resources were fully employed and were directed to that end. (This last proviso is important because, as we have already seen, a considerable increase in the employment of our productive resources has occurred since 1934, but it has been directed in the main to rearmament and the activities incidental thereto, such increase in the standard of living as has occurred being purely secondary).

We have, however, not been content merely to collect facts. We have also endeavoured to probe the mysteries of our economic system and to understand the facts we have collected, to see *why* things are as they are. We have seen how it is becoming increasingly difficult to find sufficient profitable outlets for new investment to maintain full employment, and we have accepted and carried to its logical conclusion Mr. Keynes' contention that new investment will have increasingly to be based on considerations of the general social advantage rather than on those of immediate profitability, which means it will have to be undertaken by the State. But the State will only be able to undertake new investment on these lines if it co-ordinates its different projects and considers them not only in relation to each other, but also in relation to the general economic life of the community. In other words it must plan its outlay as a whole.

But this, we concluded, is not the end of the story. The principles on which the State planning will have to be based are not only different from, they are actually hostile to, the principles on which privately owned industry and trade are carried on. The economic life of the community will thus be split into two sections, one of which is carried on for private profit, and the other for the public good, and these two must come into conflict. The public good demands the maximum expansion of production consistent with the maintenance of decent working conditions; the maintenance of private profit increasingly demands the restriction of production, frequently coupled with the worsening of working conditions. Such a dichotomy cannot persist indefinitely without creating serious internal stresses and strains, and sooner or later the whole economic life of the community will have to be reorganized on a single basis.

It is clear that the achievement of our standard, dependent as it is on a considerable increase in output, demands the adoption of an economic system which encourages the expansion of production; and it will clearly be extremely difficult, if not impossible, under a system which is being forced to turn more and more to the restriction of production in order to maintain profitability. This will remain true even when we have achieved our reasonable standard, for that standard is still very low compared with middle-class standards. When it is attained it can hardly be doubted that people will not be content to remain at that level but will wish to raise their standard still further—as far in fact as the current productive resources will permit. It follows, therefore, that if the economic system is to be organized as a self-consistent whole, it will have to be on the basis of “planned production for community consumption.”¹

It is the purpose of this chapter to indicate briefly the broad principles on which such a system of planned production would be based. To attempt to describe more than the broad principles is unfortunately out of the question, because the necessary

¹ This phrase was coined by the Webbs to describe the system of socialist economic planning in vogue in the U.S.S.R., but it would be difficult to find a more apt description of the kind of economic system we require.

data are not available, and even if they were, the task would require considerably more technical knowledge than the present author possesses. Furthermore, the details of the plan would clearly depend on the time and the circumstances of its introduction, so that no purpose would be served by trying to elaborate them now.

Since production is to be planned, we must clearly start with some central economic organization whose function it is to collect the necessary data and to carry out the actual process of planning. Since, furthermore, production is to be for use and not for profit, the planning body will have to estimate the needs of the community and their relative urgency. It will also have to estimate the productive resources available for satisfying the various needs and it will then have to allocate these resources in such a way that the most urgent needs are satisfied first, leaving the less urgent to be provided for to the extent to which productive resources are available. Finally, it will have so to fix incomes and prices that the total amount spent by the community is equal to the total value of the goods and services on sale.

These, very briefly, are the three main principles by means of which our economic plan would have to be formulated. First, an estimate of needs and resources; second, an allocation of the resources to supply the needs in the order of their relative urgency; and third, the financial equation of production and consumption by the appropriate fixing of incomes and prices.

(2) The Orthodox Economists' Criticisms of Socialist Planning

Before proceeding to elaborate these principles it will probably help towards their better understanding if we deal with some of the criticisms that have been levelled against the whole idea of planning production for use by a certain school of orthodox economists, of whom the best-known representative in Britain is probably Professor Robbins of the London School of Economics.

According to this school the test of an economic system is

the extent to which it satisfies "consumers' preferences"; in other words, the extent to which consumers are free to buy what they themselves prefer and not what somebody else, whether State or individual, thinks is good for them. Consumers have certain incomes to spend and, left to themselves, they will distribute their expenditure among various commodities according to the scale of their preferences for these commodities.

They contend that only under a system of production for sale at a profit in a competitive market has the consumer real freedom of choice. Their ideal system is one of competitive private enterprise in which no individual producer is large enough to influence the market in his favour by varying the amount he produces. Under such a system each producer will have to produce what the consumer wants at a price the consumer is willing to pay or else go out of business. The operation of the price mechanism will ensure that "scarce means are applied to alternative ends" in such proportions as will give the maximum satisfaction of consumers' preferences. Since our productive resources are limited it is impossible to produce everything that everybody would like, and they should therefore be allocated in such a way that no alternative allocation would produce a collection of goods that gives a greater satisfaction to consumers. In a free competitive market, it is contended, this optimum allocation is brought about by the price mechanism. If more of any particular commodity is being produced than can be sold at the current price, then the price will fall and therewith the profitability of that particular line of production. This in turn will restrict the entry of capital and labour, or even force some of the existing capital and labour out, until profitability is restored and demand and supply are once more in equilibrium. Similarly, if not enough of a commodity is being produced to meet the demand at the current price, the reverse process will occur. The price will rise so that the producers will obtain more than normal profits, which will cause capital and labour to flow into that line of production until profitability is restored to normal and demand and supply are again equated.

To sum up, the price mechanism operating in a free competitive market gives consumers freedom to choose how much of each commodity they will buy; it enables producers to decide how much of each commodity to produce and in what proportions to combine the various factors of production so as to obtain maximum efficiency; and it ensures that these two sets of decisions shall coincide. Price is thus the measuring rod of both producer and consumer, and the free competitive market is the medium through which it operates.

Professor Robbins and those who think with him argue that price is the only possible measuring rod, and that without a free competitive market rational economic calculation is impossible. From this some of the more extreme exponents of this school of thought proceed to argue that any economic system in which the free market and production for profit are abolished must fall into confusion and eventually break down completely. This type of criticism reached its highest point in a book published by Professor Von Mises¹ in which he purported to prove the impossibility of socialist economic planning by *a priori* reasoning on the above lines, with scarcely a reference to the actual socialist planning that was being carried on in the U.S.S.R.!

Not all the members of this school go quite so far as this. The more moderate writers, such as Professor Robbins, argue that since economic measurement is impossible without a price system, a socialist economy would have to use it; and since the price system can only operate properly in a free market, the planning body would have to try to create one artificially. In other words it would have, by introducing cost accounting, competition between different factories and plants, and similar methods, to try to reproduce as nearly as possible the conditions which automatically obtain in a capitalist economy where there is free competition.

In practice, however, it would prove impossible for a socialist economy to do this. It might be possible to reproduce the conditions of the free market so far as consumers' goods are concerned, but in the intermediate stages of production it would

¹ *Socialism*, by L. Von Mises.

break down hopelessly because the planning authority would control all the productive resources. Therefore there would be no independent buyers and sellers confronting each other, so that the essential feature of the free competitive market would be absent. Even if artificial competition were promoted among the various producing units this would not suffice, because none of the units are really independent in the sense that the manager can give up production if it is unprofitable and change over to the production of some more profitable commodity. The kinds and amounts of production are fixed by the planning body, and all the manager can do is to improve the *technical* efficiency of his plant. *Economic* efficiency, in the sense of choosing the most profitable (and hence, *ipso facto*, the most desirable) commodity to produce, is outside his authority. The most economic allocation of resources, such as occurs in the capitalist economy under the spur of private profit, is thus made impossible.

If people always bought the same things in the same quantities, and changes in fashion and taste were unknown, then it might be possible for a planned economy, either by trial and error or by the use of complicated mathematical equations based on consumption statistics, to secure the most economic allocation of economic resources. But in the real world demand is constantly changing, and by the time the planned economy had adapted itself to one set of fashions, these would be out of date and a new set would have taken their place. Nor is it only a question of changes in the relative demand for existing commodities. New desires for commodities and services previously unknown are constantly springing up, and these would be particularly difficult for a planned economy to satisfy, since such an economy must base its planning on *past* statistics of consumption which of necessity can take no note of entirely *new* demands.

The attempt to reproduce the conditions of a free market economy would thus meet with insuperable difficulties and in practice, it is argued, it would not be made. The central planning authority would fall back on arbitrary decisions and would thus become an autocracy producing, not what people

desire, but what, in the view of the planning body, is good for them. Consumers' preferences would cease to be the guiding principle of production and consequently economic welfare would be diminished. Production would be inefficient in the economic, though not necessarily in the technical, sense, because there would exist no measuring rod whereby to distribute productive resources among their various uses so as to secure "equimarginal returns."¹ Hence free competition is preferable to planning, and capitalism to socialism. Q.E.D.!

(3) *The Socialist Answer*

What is the answer to this long and intricate chain of reasoning? The first answer is that the whole argument is based on premises which do not fit the facts and which consequently have no relevance to the real world in which we live. The world of small producers operating in a perfect frictionless market, on which the above analysis is based, has never existed except in the imaginations of the economists. It is true that in the early days of industrial capitalism something approaching it did exist, but the social evils it produced in the way of low wages, long hours, child labour and the other horrors associated with the rise of industrialism were so great that the unimpeded working of free competition had to be progressively modified, if only in order to prevent the industrial population from being gradually destroyed by overwork and destitution. By 1914 not only had wages and conditions of labour become largely subject to settlement by trade boards, trade unions and employers' associations, but the small independent producer had in many lines of production become overshadowed by a few industrial giants who were in a position directly to influence the market either by varying their own output or by entering into cartels and trade agreements for the regulation of output or prices.

¹ I.e. so that the collection of goods and services actually produced has a greater money value in the market than any alternative collection produced by rearranging the distribution of the resources available.

In the second place the analysis *assumes* that in the capitalist economy all our productive resources are fully employed, for clearly no allocation of resources can be considered desirable which leaves a considerable part of them unused. We have, however, been forced to the conclusion that a planned economy is now essential, if the standard of living of the majority of people is to be substantially raised, precisely because an unplanned economy seems incapable of securing full employment. The choice, in fact, lies not between socialist planning and the ideal free market economy of the orthodox economists, in which everybody and everything is employed to the best possible advantage, but between the former and the actual economy that we have investigated in the preceding pages, in which considerable resources *are* left unused, and in which considerable effort is devoted to restriction and destruction.

The orthodox economists would of course answer that these evils are due not to capitalism as such but to interferences, particularly by the State and the trade unions, with the free play of economic forces. If only, they say, present policy were reversed and all existing interferences with the free market done away with, then their ideal state would quickly be realized. As soon, however, as one examines the nature of the "interferences" that would have to be abolished it becomes clear that such a reversal, even if desirable, is quite outside the range of practical politics. It would, for example, involve the abolition of the whole complex machinery of wage negotiation that has been built up, including not only the trade unions and employers' associations, but also the trade boards, joint industrial councils and arbitration courts that have been set up in many industries; for all these interfere with the determination of wages by the operation of supply and demand in a free market. Similarly, our whole system of social insurance, and in particular unemployment insurance, would have to go by the board, since this operates to maintain wages above their "economic" level. Finally, not only would all trade associations, combinations and cartels have to be broken up, but also all companies which are large enough to influence the market (not necessarily to control it) by their own action. In a word, we

should have to forgo the advantages of large-scale production and return to the conditions of fifty years ago, when the market was composed of a large number of small-scale independent producers. One has only to state these conditions to see how fantastic they are. In effect what the orthodox economists have done is to idealize the conditions that characterized (more or less) the early days of capitalism, forgetting incidentally all the evils of those days, and then to argue that all that is necessary to cure our economic *malaise* is to return to those conditions, quite regardless of the intermediate developments that have rendered such a return impossible. It is as if a doctor diagnosed the illness of a grown man as being due entirely to his having grown up, and then proceeded to argue that all that was necessary for his cure was to return to the pristine purity of his babyhood!

Furthermore, even if we suppose for one wild moment that the free market economy of Professor Robbins and company is somehow achieved, it still does not follow that unemployment would be abolished and the most rational allocation of economic resources brought about. The orthodox analysis assumes that there is no such thing as involuntary unemployment, because it is always open to wage-earners to accept a reduction in wages which in turn will lead to an increase in employment. Under conditions of free competition, it is argued, wages will fall automatically to the levels necessary to secure full employment; from which it follows that any unemployment that does exist must be due to deliberate action, either by the State or by the wage-earners through their trade unions, to maintain wages above their "natural" level. This view, however, has been strongly criticized by Mr. Keynes, who points out that the wages with which the orthodox analysis is concerned are *real* wages, whereas the wages with which trade union negotiators are concerned are *money* wages; and it is a matter of common experience that whereas trade unions will almost always resist a reduction in real wages brought about by reducing money wages, they are far more slow to resist such a reduction when brought about by a rise in prices. Moreover, although it is always open to wage-earners to accept a reduc-

tion in money wages, it may prove impossible for them to accept a reduction in real wages, for the former reduction may set up reactions in the economic system which cause prices to fall faster than money wages, so that real wages (for those still employed) actually rise. Hence Mr. Keynes' devastating conclusion (devastating, that is, to orthodox economic theory) that "the postulates of the classical theory are applicable to a special case only and not to the general case, the situation which it assumes [i.e. full employment] being a limiting point of the possible positions of equilibrium. Moreover, the characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience."¹ Hence also Mr. Keynes' elaboration of a general theory which takes account of the possibility of involuntary unemployment, which we examined at some length in an earlier chapter.

It is clear that Mr. Keynes' criticism completely invalidates Professor Robbins' claim that rational economic calculation is only possible in a capitalist economy; for no system can be considered rational which condemns a substantial part of its resources to involuntary idleness. Even if its other assumptions are accepted, the price system could only be considered a rational measuring rod in a society where there is full employment; but our previous analysis has shown that continuous full employment is only likely to be attained in a society in which production is planned for use and not for profit. In other words, the conditions which alone could justify Professor Robbins' claim are incapable of more than temporary fulfilment in present-day capitalist society; and even this would involve a considerable degree of conscious planning.

We have shown that the policy advocated by Professor Robbins is quite incapable of fulfilment and that even if it were fulfilled it would be most unlikely to produce the results he desires; but we have not so far disputed his contention that his ideal society, if it could be realized, would provide a rational

¹ J. M. Keynes: *The General Theory of Employment, Interest and Money*, p. 3.

economic calculus which is impossible in any other society. But is this contention really justified?

His argument, it will be remembered, rests on the assumption that the test of economic welfare is the extent to which consumers' preferences are satisfied. These preferences express themselves in the form of a money demand for the different goods and services available in the market, so that the test resolves itself into the extent to which people are free to spend their incomes as and when they will, and producers are free to follow the dictates of the demand so expressed in deciding when and what they will produce. Now the existing consumers' preferences are a result of the existing distribution of incomes, and their satisfaction can only be taken as a test of welfare if we assume that the current distribution of incomes is *right*, or at any rate is more right than any alternative distribution. Professor Robbins compares the system of production for the market to an election in which each consumer "votes" for a certain collection of goods and services, the strength of his vote for any particular commodity being measured by the amount he actually spends on it. Producers then estimate the relative strengths of the votes for different commodities and produce accordingly. There is, however, as Mr. Maurice Dobb¹ has pointed out, a snag in this election, that consumers do not all have the same number of votes. The wealthy society lady has a thousand or more times the number of votes that the ordinary wage-earner has, with the result that her "vote" for luxuries for her pet poodle carries more weight than the wage-earner's "vote" for the essentials of life for his children. In other words the demand that counts in determining what shall be produced is not needs but what the economists call "effective demand," that is, capacity to pay.

In a society in which there was an approximate equality of incomes it might be legitimate to argue that the satisfaction of consumers' preferences should be the criterion of economic welfare; but it is quite illegitimate in a society which exhibits the gross inequalities that characterize our present-day capita-

¹ "The Problems of a Socialist Economy," by Maurice Dobb, *Economic Journal*, December 1933, p. 591.

list societies. It is claimed in its favour that if supply and demand were allowed free play, the operation of the price mechanism would ensure that production is adapted to demand in such a way that each factor of production gets its appropriate reward, so that the inequality of incomes simply reflects the different demand for the different agents of production, and consequently their value to the community. We have already rejected this claim by showing that there is no reason to suppose that the free play of supply and demand will automatically produce full employment, but quite apart from this the argument involves circular reasoning. It begins by taking for granted the existing distribution of incomes and then proceeds to argue that the satisfaction of the resulting consumers' preferences necessitates that distribution, which must therefore be considered as the most rational distribution possible. In other words, if we begin by assuming that the existing distribution is correct, we shall have no difficulty in proving that it is the best ever!

The fact is, as we have already had occasion to point out, that incomes are at one and the same time both the reward for productive services and the demand for the goods produced. If we alter the incomes we alter the demand, so that we cannot take existing consumers' preferences as an *independent* entity. They are quite as arbitrary and irrational, having arisen largely as a result of historical accident, as any that are likely to be determined by a planning commission bent on estimating social needs. In fact, any criterion of production based on existing incomes, because they include large unearned incomes which, as we saw in the last chapter, cannot to-day be justified by reference to any service rendered, is likely to be far more irrational and arbitrary than the planned production for community consumption that we are advocating.

We need not, therefore, be unduly disturbed by Professor Robbins' charge that the decisions of a planning commission would be found to be arbitrary because it would lack the rational economic calculus provided by the operation of the price mechanism in a free market; for the latter is founded on the existing gross inequality of incomes, and anything more

irrational it would be difficult to find. It is, however, not sufficient to show that the system we are advocating cannot be less rational than the existing one; we must also show that it is far more rational. If we reject the criterion of consumers' preferences as expressed in the free market, what are we going to put in its place?

Professor Robbins and his followers deny that there is any other rational criterion. We have no means, they say, of knowing what people want other than by the amounts they are prepared to pay. The satisfaction a person obtains from the consumption of any particular commodity is subjective and is consequently known directly only to the person concerned. It is impossible to compare one man's satisfaction directly with another's. We cannot say whether the rich old lady gets more or less satisfaction from her expenditure on dainties for her poodle than the unemployed miner and his family get from their expenditure on the food necessary to keep them alive; for we have no way of making a direct comparison. All we can compare is their willingness to pay, or, in the economists' jargon, their "effective demand." The possibility of estimating needs independently of ability to pay is rejected completely. Professor Robbins has stated this conclusion quite explicitly in his book *The Nature and Significance of Economic Science*:

But suppose that we differed about the satisfaction derived by A from an income of £1000, and the satisfaction derived by B from an income of twice that magnitude. Asking them would provide no solution. Supposing they differed. A might urge that he had more satisfaction than B at the margin. While B might urge that, on the contrary, he had more satisfaction than A. We do not need to be slavish behaviourists to realize that here is no scientific evidence. There is no means of testing A's satisfaction as compared with B's. If we tested the state of their blood-streams, that would be a test of blood, not satisfaction. Introspection does not enable A to discover what is going on in B's mind, nor B to discover what is going on in A's. There is no way of discovering the satisfactions of different people.¹

¹ *The Nature and Significance of Economic Science*, pp. 123-4.

In the same book Professor Robbins also quotes one of the leading foreign economists to similar effect:

Science is guilty of trespassing beyond its necessary limits—that is to say, it is delivering a judgment of value—if it attempts to lay down for others which of two real incomes is the “larger.” To decide on this, to decide which real income is to be preferred, is a task which can only be done by him who is to enjoy it—that is, by the individual as “economic subject.”¹

Now the whole of the first part of this book has been based on the assumption that it is possible to estimate needs independently of ability to pay. We have assumed that people have certain needs which it is desirable should be satisfied, and that their standard of living is measured by the extent to which that satisfaction is obtained. On this basis we have endeavoured to construct a minimum standard of living below which people should on no account be forced to live, and a reasonable standard below which it is highly desirable that they should not live, and in doing so we have used criteria which are independent of the amount of money any particular individual spends.

In the case of food we made a direct estimate of physiological needs in terms of physical quantities. We said that so many calories of energy, and so many grams of protein, fat, etc., were necessary for a healthy life, and only *after* that did we find their cost in monetary terms. Similarly, in the case of housing we first estimated needs in terms of dwelling space and only then tried to estimate how much it would cost to provide this space. In the case of most of the other items it is true that we made a direct monetary estimate based on what people actually spent, but this was really a device to obviate the necessity of enumerating everything in terms of physical quantities. We differentiated expenditure into certain broad groups—clothing, fuel and light, and so on—and we then estimated the necessary expenditure on clothing, say, on the basis of the actual expenditure of groups of people whom we considered in fact to be adequately clothed. We might, of course, have given a com-

¹ *The Nature and Significance of Economic Science*, p. 63, footnote.

plete list of the actual items of clothing necessary for a group of people to achieve our standard and then calculated its average cost per head, but for our purposes such accuracy was unnecessary. Nevertheless, the fact that we made our estimate directly in terms of money must not obscure the fact that the basis of the estimate was the actual physical clothing considered necessary or desirable.

Furthermore, we have definitely assumed that people's needs are sufficiently similar to enable us to use the actual expenditure of one group of people in estimating the desirable expenditure of other groups of people; in other words we have assumed that a given expenditure by two groups of similarly situated people is likely to produce similar satisfactions. Now the whole essence of the argument that we have been examining is that it is impossible to get behind the money expenditure to the satisfactions obtained by that expenditure and to argue that it is more important for the poor man to have a loaf of bread than for the rich man to have a glass of champagne. This argument really boils down to the assertion that it is impossible to measure needs at all, and hence impossible to say that some expenditure is socially more desirable than others.

Is such an assertion really justified? It would only be true if men were isolated individual animals with no needs or desires in common. Only in this case would it be impossible to estimate social needs or to deduce the probable expenditure on different commodities, if their incomes were increased, of one group of people from the actual expenditure of another group. But if this were true man would have no social life at all, and such sciences as those of medicine and psychology could not exist. In practice, however, both doctors and psychologists know that men are sufficiently similar in their general make-up to enable the results of studying some individuals to be generalized and applied to others. Of course, no one individual is precisely the same as any other and due allowance must be made for this in applying the results of past experience to individual cases. This, however, does not invalidate the application of the scientific method to the study of human beings; it only means that it must be used with care.

In precisely the same way, although individuals differ in the details of their expenditure, yet the broad outlines are similar; and in considering, as we have done, the expenditure of very large groups of people the individual idiosyncrasies average themselves out so that we can generalize pretty accurately from one *group* to another, though not necessarily from one individual to another. We must therefore reject the contention that it is not possible to estimate needs, or to compare the social value of different types of expenditure, as contrary to all human experience. Indeed it may be asked why we have thought it necessary to spend so much time in refuting views which are so manifestly absurd. For after all, surely very few people really believe that it is impossible to say whether the worker's expenditure on the necessities of life for his children is socially more or less desirable than the rich lady's expenditure on her poodle!

It is true that very few people believe this consciously, but it forms the unconscious background of the actions of many people who would indignantly repudiate it when put explicitly in this form. In fact, it would probably not be unfair to say that it is the unconscious belief of the great majority of people who are comfortably off, and probably even of the readers of this book! For only on this basis can we explain the complacent acceptance by such people of a standard of life far above the average when considerable sections of the population are undernourished. We cannot explain it on grounds of ignorance, for even the least socially conscious of us has heard of the distressed areas! and in any event such an explanation could not account for the vehemence with which certain politicians, with considerable middle and upper class support, have attempted to reduce the payments to the unemployed to the minimum they could be induced to accept in order to limit the taxation of large incomes. No, we have to face the unfortunate fact that most of us believe in our heart of hearts that our own expenditure, however trifling or wasteful, is more important than the expenditure of other people even on necessities; and herein lies the value of the kind of economic argument that we have been considering. For this argument makes explicit our unconscious beliefs and pursues them to their logical conclusion;

and in so doing it reveals their essentially anti-social nature. This is a great step forward, for few people like consciously to admit that their activities are anti-social. It is unlikely to cause many rich people "to sell all they have and give to the poor"; nor indeed is this the most desirable solution of the problem in view of the unused productive resources at present going to waste which we have at our disposal. But it may cause some people to realize the essentially anti-social nature of our present economic system, and consequently to devote some effort to replacing it by a system in which all our resources will be fully employed and directed to providing everyone with at least the necessities of a civilized life before providing luxuries for the few.

In the second place, the argument is interesting as illustrating the lengths to which the exponents of the system of production for profit are now being driven in their attempts to justify it. Until recent years there was a widespread belief that the capitalist method of production did, on the whole, promote the maximum welfare of everybody. There were, it is true, grave evils, but these were gradually being eliminated and a progressive, even if gradual, increase in the general standard of living and of well-being seemed assured. Under these circumstances it was natural that the apologists of the present system should argue, quite sincerely, that capitalism, in spite of its admitted defects, was providing a standard of living for the mass of the population far higher than had ever been known before, and a standard moreover that was continually rising. They could, in other words, justify capitalism on the ground that it was promoting social welfare as fast as could reasonably be expected.

Now, however, the position has completely changed, and it is no longer possible, as our previous investigations have shown, to justify our present economic arrangements on these grounds. It is true that this belief in a continued and ordered progress still persists as the unconscious background of many people who do not trouble their heads with economic and social problems; but for anyone who is actively concerned in the investigation of these problems a *conscious* acceptance of this belief is no

longer possible. The result is that orthodox economists such as Professor Robbins, whose intellectual integrity cannot be questioned, have been forced to give up any justification on these lines. They have found, however, two avenues of escape from the obvious conclusion that the system of production for profit has outlived its usefulness. The first, as we have already seen, is by retiring into an abstract ideal capitalist world of their own creation, and then complaining because the actual world will not conform to it; and the second is by denying the possibility of assessing human needs, as distinct from consumers' preferences, at all. For if we cannot assess human needs we cannot criticize the existing system on the ground that it does not satisfy them.

In refuting the contention that consumers' preferences as expressed in the market form the only rational criterion on which to base production, we have been forced to answer the question we asked a few pages back, namely, what is the alternative? We rejected Professor Robbins' criterion on the ground that it is quite arbitrary, at least so long as incomes are so grossly unequal as they are now, and that it takes no account of human needs that are not expressed in the form of a money demand; and we further concluded that such needs could be estimated and taken into account.

Here, then, is the alternative criterion we desire. If we can estimate human needs apart from money demand—and we spent the first half of this book in doing precisely that—it should not be beyond the wit of man to adapt our productive resources to satisfying those needs. In fact, in a community in which production was planned for community consumption, the Planning Commission would proceed in much the same way as we have done. The Commission would first have to estimate the minimum standard of living that it was felt desirable that everyone should attain; it would then decide what increases in output were necessary to achieve this standard and what resources were available for doing so; and finally it would have to go a stage beyond what we have attempted and decide how the increased output was to be distributed so as to ensure that everyone attained the minimum standard decided upon. The

Planning Commission would of course estimate its minimum standard in very much greater detail than we have attempted. It has been sufficient for the purposes of our investigation to divide expenditure into certain broad categories and to leave the detailed expenditure within each category rather vague. Particularly was this the case with expenditure on clothing and miscellaneous items. The Planning Commission on the other hand would have to estimate both the amount that would be required of each individual commodity and the price at which it is to be sold. In so doing it would be largely guided by past experience as to the way in which people with incomes sufficient to achieve the minimum standard had actually spent their money. It would, in other words, have regard to consumers' preferences *within this range of incomes*. The Planning Commission would in this way settle the broad categories of desirable expenditure, but within these categories it would be guided mainly by what consumers themselves want to buy. It would not necessarily be entirely guided by this criterion, for in certain respects the Commission would probably attempt to educate consumers as well as follow them; this would be particularly desirable for instance in regard to the relative value of different kinds of foodstuffs.

Having provided the minimum standard for everybody there would be certain resources available for the production of luxury and semi-luxury goods. In this case also the Planning Commission would be guided by consumers' preferences as expressed in the most recent statistics of retail purchases, although here also it might be desirable in special cases to restrict demand on social grounds—the sale of alcoholic liquor is a case in point.

Since apparently the Planning Commission is to be guided so largely by consumers' preferences as expressed in the figures of retail purchases, it may be asked what is the difference between this system and that of production for the market which we have just rejected. Are they not after all both based on the criterion of the maximum satisfaction of consumers' preferences? And if so is all the trouble and bother of setting up a Planning Commission really worth while?

This objection overlooks the fact, as we pointed out when criticizing Professor Robbins' analysis, that consumers' preferences are not absolutes but are themselves the outcome of the current distribution of incomes; and it is the inequality of incomes that makes consumers' preferences such an arbitrary and unjust criterion in a capitalist society. In a society in which production is planned for use the very large incomes to which we are accustomed will no longer exist. Large unearned incomes will be abolished altogether while large earned incomes, dependent as they are on the existence of a small class of wealthy people, will be considerably modified. The Planning Commission will have to plan incomes as well as production, and in doing so it will automatically fix the framework within which consumers' preferences can be safely used in most cases as a guide to what is wanted. The important thing is to see that everyone has an adequate income.

Even in the kind of society we are envisaging, however, there will be some inequality of incomes. To achieve the maximum development of production, and therewith the maximum increase in the general standard of living, it will be necessary to pay people in accordance with the quantity and quality of the work they do. In Utopia it may be that the unskilled worker will be paid as much as the skilled, the dustman as much as the engineer or doctor; but we are not at present concerned with Utopia. In the present stage of development of human nature it is unfortunately necessary to pay people more if they are to be induced to increase their output or improve their qualifications, and it is no use blinking the fact. Nevertheless this means that even in our planned society consumers' preferences cannot be used as our sole criterion. This would only be possible in a society in which incomes were approximately equal. So long as they are unequal, so long will consumers' preferences be inadequate as a guide to real needs. This is why we must first secure a minimum standard based on needs and only use consumers' preferences as our criterion after that standard has been provided for everyone. The best way to achieve this will probably be by the development of the system of social services, which will supplement actual money incomes

and ensure that even those receiving the lowest incomes will reach the minimum standard considered essential. This method has the additional advantage that it takes account of variations in the number of dependants which the wage-earner has to provide for, and which cannot adequately be provided for in fixing the actual wage.

It may indeed be argued that within their sphere of operation consumers' preferences will be satisfied far more effectively in our planned economy than they are under capitalism. The choice supposed to be exercised so freely by consumers under capitalism is in fact not half so free as Professor Robbins would have us believe. We are continually being bombarded by advertisements in newspaper, bus and hoarding to buy so-and-so's soap or somebody else's baking powder, to say nothing of those other advertisements which attempt to persuade us that we all smell, suffer from bad breath, lack of energy and sundry other evils; conditions which can only be cured by purchasing the advertiser's particular product. So important has advertisement become that salesmanship has developed into a business of its own, and the correct "putting across" of an article to the public is frequently a more important factor in achieving sales than the article's own merits (or demerits). The whole point of this "high-powered salesmanship" is to persuade people to buy what the manufacturer wants to sell, rather than what they would choose to buy if left to themselves. It may be formally correct to say, as Professor Robbins does, that the successful manufacturer is he who produces what the public wants, but the real measure of his success is the extent to which he manages to persuade the public to want what he produces. The result of all this mass suggestion is that most of us buy the things which are most widely advertised, even although they are frequently more expensive than other equally useful goods which are not advertised so much. In the socialist planned economy there would be no need for all this costly salesmanship, and people would consequently be far more free to buy what they really want. They would be able to express their own individuality in their purchases, instead of being cajoled into buying things

by advertisements which bear no relation to the real merits of the articles in question. In particular they would be saved from buying, under this sort of pressure, articles which are frequently useless and which could never be sold on their intrinsic merits.

Not only will this distortion of consumers' preferences be prevented when production is no longer carried on for profit, but consumers will also be able to express their wants directly. In the shops in the U.S.S.R. there are books in which customers can (and do) criticize the goods currently on sale and express their desires as to the kind of goods they want to buy and the improvements they would like to see effected. These criticisms and suggestions are examined by the manager of the shop and passed on to the appropriate quarters, where they are taken into account in drawing up the subsequent production plans. Similar criticisms and discussions are also carried on in the local Press.

This direct contact between consumer and producer is extremely valuable and enables the consumer's point of view to be put in a way which is very difficult, if not impossible, in capitalist countries. It enables the consumer to have a real say in determining what should be produced, in contrast to the largely fraudulent freedom he has under capitalism.

Retail goods of the luxury and semi-luxury type are, however, not the only things the people of a country desire once their basic needs are satisfied. They are not even the most important things, in spite of the stress laid on them by our orthodox economists. More important than these by far are the cultural and recreational facilities, the educational opportunities, and the health services which are provided. The middle and upper class person tends to take these things for granted, because he already enjoys them, but for the working class, and they after all are the great majority, these things make all the difference between living and merely existing. They are things, moreover, which are difficult to organize on a profit basis and which therefore tend to be reduced to a minimum in a capitalist society. A socialist society, on the other hand, precisely because it is not restricted by the necessity of making

profits, is pre-eminently fitted to expand such services to the uttermost, so that they are freely available to everyone who can profit by them instead of being largely restricted to a relatively small minority. A lot of shortcomings in the production of consumers' goods may be forgiven to a society which provides these essential services in abundance to all its members; although it is perhaps not to be wondered at that professional economists, who are themselves usually pretty comfortably off, should concentrate on the former and overlook the latter.

(4) *The Planning of Production*

Having discussed some of the theoretical objections that are advanced against socialist planning, we are now in a position to consider in more detail the principles of such a planned economy. We have already seen that the Planning Commission will have at its disposal a great mass of data concerning the productive resources available, together with corresponding data concerning the desires and needs of consumers. This data will be sent in from innumerable factories and farms all over the country, and will show in detail both what has been produced in each individual productive unit in the preceding period, and what the unit estimates it could produce in the succeeding period; while similar data from the retail and distributive organizations will enable a picture of past and estimated future consumption to be built up. We have already seen how consumers can participate directly in providing this information through the provision of books for suggestions and criticisms in all retail units.

When the Planning Commission has collated all this information and so obtained an inventory of the country's resources, it cannot assume that all these resources can forthwith be utilized for satisfying present needs. Some of them must be allocated to the satisfaction of future needs; in other words, to providing for capital development. The first question, then, that will have to be decided is what proportion of the total resources is to be devoted to capital development, and what

proportion is available for satisfying immediate requirements. In the present state of the world, moreover, it is probable that some resources will have to be devoted to the upkeep and strengthening of the country's defence forces.

It is unlikely that such questions as this will be answered by the Planning Commission itself. They involve decisions as to ultimate social and economic *policy*, and as such should be made by whatever body is responsible for collective decisions of this nature. (In this country, for example, such decisions would at present be made, or at least ratified, by Parliament.) This body will decide broad questions of policy, and the Planning Commission will operate within the limits thus laid down; though naturally its views and recommendations will be taken into account when the general policy is being considered.

In the case of defence expenditure it is reasonable to suppose that the views of the military experts will carry the greatest weight (the interests of private arms manufacturers will fortunately not have to be taken into account), and the Planning Commission will have little to say on the demand side, though it may have plenty to say on the supply side. On the question of capital development, however, its views will carry a great deal of weight; for the optimum volume of new development depends on the extent to which production can be increased by such development, which in turn depends partly on the rate of technological progress and partly on the current state of development of the country's resources. If the country has very few factories, roads, railways, etc., new capital development will give a greater "return," in the form of increased production, than will be the case if the country has an abundance of these things; and similarly if its industrial equipment is out of date. It follows that the poorer the country's industrial equipment in relation to its potential resources, the greater is the increase in production to be obtained by new capital development, and the greater consequently the possibilities of raising the future standard of living. The conflict between present and future needs is thus most acute in the early stages of industrial development. In this stage the community will have to take the difficult decision as to how far it is prepared to

pull in its belt in the present in order to be able to enjoy greater abundance in the future.

In an advanced industrial community both the sacrifices entailed in new capital development and the advantages to be obtained from it are much smaller, and the decision as to how much the community is prepared to "save" is made correspondingly easier. In this respect planning in Great Britain would be very much easier than it has been in the Soviet Union. In the latter, industrial development had hardly started prior to the Revolution, and what little there was was largely destroyed during the War and the Civil War. The Soviet Government had therefore to start almost from scratch, and it soon realized the impossibility of raising the general standard of living to any appreciable extent without an adequate heavy industry. The development of other backward countries has generally been accomplished by means of loans from the older capitalist countries, but in their case this expedient could not be adopted, for political and other reasons, to any large extent. The building up of a heavy industry was therefore bound temporarily to entail a considerable restriction of an already low standard of life. As is well known, in the First Five Year Plan an unprecedentedly high proportion of the nation's resources were devoted to new industrial construction, with the result that the Russian people undoubtedly endured considerable hardship during that period.

A planned economy in Great Britain would not encounter this difficulty. Britain is already a highly industrialized country, and a relatively small proportion of her total resources would suffice to procure an adequate rate of new development. There is thus no reason for supposing that a planned economy in Britain would have to go through a difficult period corresponding to that of the First Five Year Plan in the Soviet Union. The difficulties of the latter were due in the main, not to planning, but to the low stage of industrial development. This vital distinction between planning in the Soviet Union and planning in Britain is not always appreciated by those who attempt to apply the experience of Russian planning to this country.

Much stress has been laid by the critics of planning on the difficulty in a planned economy of making the decision as to how much should be saved. In a capitalist economy, they say, the most desirable rate of saving, and hence of capital development, is achieved by the operation of the rate of interest. Each individual decides for himself how much he wants to save, and in doing so he is influenced by the interest he can get on his savings. The higher the rate of interest the more people are willing to save, and the less industrialists are willing to borrow, and through the medium of the money and capital markets the actual rate of interest settles down at the point at which savings and borrowings are equalized. In the planned economy, however, there is no such automatic regulator, and therefore the amount of saving must be decided arbitrarily by the Planning Commission or other similar body.

The objections to this criticism are similar to those already advanced against the charge of arbitrariness in the production of consumers' goods. There is no reason to believe that the amount of saving that takes place in a capitalist community, dependent as it is on the existing distribution of incomes, is in any sense the most desirable from the point of view of the community as a whole. Nor is there any reason for assuming that the decision as to the quantity of saving in a planned economy must necessarily be an arbitrary one. The rate of capital development, whether in a capitalist or a socialist economy, intimately affects the lives of all the individuals in the community, and it should therefore be settled by the collective will of the community and not by the individual actions of a wealthy minority. There is no more reason for assuming that the legislative organs through which that will is expressed will act arbitrarily in regard to this question than there is in regard to any other issue of social policy.

Quite apart from these considerations, however, we have already seen in the last chapter that the operation of the rate of interest in a capitalist economy does not produce the happy results claimed for it by orthodox economists. We saw there that the function of the rate of interest is *not* to equalize savings and investment, but to equalize the available quantity of money

and the desire to hold wealth in the form of cash. The volume of new investment is determined by the relationship between the rate of interest and the marginal efficiency of capital, and we have seen that the difficulties of an advanced capitalist economy can be traced in the short run to the fact that the latter fluctuates far more widely and rapidly than the former, and in the long run to the impossibility of offsetting the continued decline in the marginal efficiency of capital by any practicable reduction in the rate of interest.

It is interesting to note that the difficulties connected with new capital development in a capitalist economy are precisely opposite to those encountered in a socialist economy. In the latter, they are most acute in the early stages of industrialization, and they arise from the difficulty of securing a sufficiently high rate of capital development without unduly cutting down current consumption. After this stage has been passed, the higher the level of existing development the simpler the problem of providing for new development; for the drain on productive resources, and hence the sacrifice of current consumption, grows constantly smaller.

The capitalist economy, on the other hand, is not directly concerned with standards of consumption, and so the early stages of development are the easiest since they are the most profitable. As industrialization progresses, the problem of maintaining the profitability of new investment, and hence the volume of employment, becomes increasingly acute, for the socialist solution of reducing new investment and directly increasing the consumption of the mass of workers is not open to it. The very thing which is most desirable in a socialist society, the reduction in the need for new capital development, is the cause of all the trouble in the capitalist economy! We may therefore fairly claim that in an advanced industrial country the planned economy, so far from intensifying the problem of new capital development, provides the only satisfactory solution of it.

New capital development may be roughly divided into two categories. The first comprises the exploitation of unused resources by existing methods, including the construction of

new factories, roads and railways and the development of newly discovered mineral resources; while the second comprises the modernization of the existing industrial equipment by the application of new methods and inventions rendered possible by scientific progress. These two categories in practice will overlap, for clearly any extension of plant is likely to embody the most up-to-date machinery and processes; while sometimes a new invention may involve the scrapping of the existing plant and the building of completely fresh equipment. Nevertheless the broad distinction between an extension of production by the duplication of existing plant and the intensive development of existing productive capacity by the introduction of new methods is clear.

The relative importance of these two categories varies with the stage of the country's general industrial development. In the early stages, when there is considerable potential wealth lying undeveloped, the extension of the area of industrialization is the most important thing. New roads, railways, factories and mines are constructed as speedily as possible and new towns spring up almost overnight. It is at this stage that the greatest sacrifices in current consumption are called for, unless external loans are available. After this process of "opening up" the country has been accomplished, however, the need for such extensive development declines, and the task of maintaining the existing industrial equipment up-to-date becomes correspondingly important.

In a socialist country in which the process of industrialization has been largely completed, it is reasonable to suppose that by far the greater part of each year's new capital investment will be directed to modernizing the existing plant and equipment; and the amount of new investment required for this purpose will depend on the current rate of technical advance. It may occasionally happen that some new discovery will revolutionize a whole branch of industry, or even a whole series of branches, and the decision will then have to be taken as to whether the consequent changes are to be carried through as quickly as possible, or more gradually over a series of years. Normally, however, the volume of new investment required to keep

industry as a whole up-to-date is not likely to fluctuate very greatly from year to year, even though it may do so in individual branches; for a socialist economy would not allow whole industries to get completely out-of-date as regards methods and equipment, as happened under private enterprise in the iron and steel and cotton industries in this country.

In an advanced industrial country operating a planned economy, therefore, there will normally be no difficulty in deciding how much to invest in any year; for the decision will be based to a very large extent on the volume of new technical improvements that have become available as a result of recent research. There will be, it is true, a certain amount of extension of existing plant—to keep pace with the increase in population, for example. When the system of planned production for use is first introduced, a considerable extension of the light industries making consumers' goods will probably be necessary in order to raise the standard of living of the mass of the people as rapidly as possible; but this, as we have already seen, is not likely to be a very long or difficult process in a country already possessing a well-developed heavy industry. Once this has been accomplished the further extension of light industry will to a large extent be bound up with the development and popularization of new consumers' goods such as the radio or household refrigerator—things which can be turned out in large quantities with surprisingly little new capital investment.

When the decision has been made as to what part of the national resources are to be devoted to new capital development, the Planning Commission can begin the allocation of the remaining resources to the satisfaction of current needs. These needs can be broadly classified in groups in diminishing order of social importance.

In the first group come the basic needs of life—food, clothing, fuel and housing, together with the necessary household requisites. These things comprise the minimum which should be provided for every citizen and should therefore be the first charge on the country's productive resources. As we have seen in the first part of this book, no hard and fast line can be drawn between those things which are absolutely essential and those

which are conventionally necessary, or between the latter and luxury goods. They shade into one another, particularly as regards clothing and household furniture, and the minimum level to be provided for all citizens would no doubt be raised as the wealth of the country and the general standard of living of its inhabitants increases. In Britain at the present time, for example, it might well be fixed at the level of the reasonable standard we have described in earlier chapters, except in respect of housing where it would probably take several years for that level to be reached by the whole population.

Having provided for the basic needs, the next step is to provide medical and health services on a scale adequate to ensure the maximum health and well-being of every citizen. In view of the present inadequacy of such services in this country, and the considerable reorganization that would be necessary to make them freely available to everyone, it is probable that the achievement of this ideal would also have to be spread over several years. Nevertheless, in view of the large amount of preventable ill-health existing at present, this must be regarded as one of the most important and urgent tasks the Planning Commission would have to undertake. In order to achieve the maximum results it would probably be necessary to make all such services free, which would involve a considerable extension of the existing facilities, and also to undertake a good deal of educational propaganda. The task of raising the general level of health would of course be facilitated by the general shortening of hours of work, and in particular by the abolition of the excessive hours at present worked in certain trades where the workers are badly organized, which a planned economy would make possible.

Almost, if not quite, as important as the extension of the health services is the raising of the general level of education by the provision of educational facilities for everyone capable of benefiting from them. At present the general level of education in this country, although higher than at any previous time, is still woefully low, and hundreds of thousands of children leave school between fourteen and fifteen, mainly for economic reasons, who could profit by a continuation of their

education. In 1934 only 16 per cent of the children who left public elementary schools in England and Wales proceeded to full-time schools of other types. It can scarcely be argued that only 16 per cent of the children in this country are capable of profiting from a continuation of full-time education beyond the age of 14, and it will readily be admitted that in the majority of cases one of the main reasons for leaving is that the parents cannot afford to maintain the child at school any longer than is absolutely necessary. The result is that a considerable part of the nation's ability is wasted through inadequate education.

A socialist planned economy, being concerned with the maximum development of the community's resources, including the intelligence and ability of its citizens, will not be able to afford this waste. It will therefore try to ensure that each child's abilities are developed as fully as possible. This means that the normal child will receive full-time education at least to the age of 16, while further education beyond that age, including technical education, will be provided for all those showing the necessary aptitude. To ensure that no child is prevented by poverty from continuing his education, it will be necessary not only to make such education completely free, but also to provide adequate maintenance allowances for those children whose parents could not otherwise afford to keep them at school.

It is clear that to extend the educational system in this way will demand a very great increase in the number of schools, of apparatus and of teachers, and it is probable that in the early years of a planned economy a considerable part of the nation's resources would have to be devoted to this end. Nevertheless, this building up of the community's human capital is likely in the long run to prove the most profitable of its investments, and one well worth any temporary reduction in the production of non-essential consumption goods that might be necessary.

In addition to this extension of full-time education, a considerable increase in both pre-school and post-school educational facilities will probably be judged desirable. Nursery schools in most areas are at present conspicuous by their absence, and both these and facilities for adult education could

be extended with great advantage both to the individual and to society.

The raising of the general level of education combined with increased leisure will mean a great increase in the demand for cultural and recreational facilities, and the provision of such facilities may be considered as the next most important item on the Planning Commission's agenda. Healthy minds demand healthy bodies, and there are still far too many of both children and adults in our big towns who are denied adequate opportunities for sport and recreation. Cultural development is probably even more restricted, for most cultural pursuits demand both time and money and suitable accommodation, with the result that the cultural contacts of the great majority of people are restricted to the radio and the local cinema. How many working class people, for example, have any opportunity to develop any musical or dramatic talent they may possess? Yet there must be a considerable volume of such talent whose development is at present frustrated. The raising of the general cultural level is perhaps as important as an increase in the educational facilities from the point of view of promoting the maximum happiness; and the provision of the necessary clubs, libraries, parks, etc., will certainly play an important part in the nation's yearly plan.

Another important item on the Planning Commission's agenda will be the provision for scientific research and development. A good deal of industrial and technical research will of course be carried out directly by the industrial trusts; and similarly medical research will be carried on in the hospitals as part of their normal duties. Such research, however, will be mainly devoted to the immediate problems of the particular industry or hospital concerned, and quite apart from this, a great deal of more purely scientific research will be carried on. At present such research is too frequently dependent on financial assistance from wealthy individuals or from large companies, and the consequent financial insecurity makes the adequate planning of large-scale experiments extending over lengthy periods a matter of considerable difficulty. Not least among the benefits of a planned economy must be placed the

possibility of co-ordinating and planning scientific research without the restriction caused by lack of adequate funds.

Finally, the Commission will have to provide for the production of luxury and semi-luxury goods. As the wealth of the country increases so the importance of these goods in the national economy will increase also, and one of the tasks of the Commission will be to make available to the whole population goods which are at present enjoyed only by a small minority. Nevertheless this will be one of the least important tasks of the Commission, and the resources available for this type of production will be computed only after adequate provision has been made for the various social services—medical, educational, cultural, etc.—that we have described above.

The charge is frequently made against socialist planning that it is completely materialist, in the crude sense that it is only concerned with increasing the material goods available without regard to those non-material or "spiritual" values which form an essential part of the good life. On the other hand, the criticism of the orthodox economists is almost entirely based on the supposed superiority of the capitalist system in the production of material goods. In actual fact both criticisms are misplaced. The capitalist system, at any rate until relatively recently, has succeeded in providing an abundance of both material and non-material goods for a small minority but it has signally failed to extend this abundance to the great majority, for reasons we have already examined. Furthermore, so far at least as Britain is concerned, its failure has probably been even greater in the field of non-material than that of material goods. One of the great advantages of the planned economy is that, so far from neglecting non-material goods, it will for the first time enable the great mass of people to enjoy those advantages of security, leisure, education and culture which are at present denied them. It may be that in the process it will be necessary to cut down, at any rate temporarily, the supply of luxury goods such as private yachts or even private cars, and to that extent the economists' criticism may appear justified. Such goods, however, are beyond the reach of most of the population even at present, and any lowering of the material standard of the

minority will be amply compensated by the fuller life made available for the majority.

The plain fact is that goods of this type play a relatively insignificant part in promoting the general happiness. So long as the basic needs are unsatisfied, every increase in material prosperity carries with it a corresponding increase in well-being; but once these are provided for, further increases in the supply of material goods tend to be subject to rapidly diminishing returns in the happiness they produce, until eventually the point is reached at which any further increase simply gets in the way and prevents any real enjoyment being obtained from the goods already possessed. What the critics overlook is that, once basic needs are provided for, the truest happiness is obtained from intellectual and cultural pursuits, and the real measure of a society's civilization is the extent to which its members are educated, and have the opportunity, to enjoy themselves in this way.

It is true that in a capitalist society the test of success is the extent of one's worldly possessions. In a world where the object of production is profit it is inevitable that the generally accepted standard of happiness should be a wealth standard and that a man's importance to the community should be judged by the amount of wealth he possesses; for if it were not so the whole pursuit of profit would become meaningless and the whole system would disintegrate. Production for profit can only be carried on provided the man who amasses profits thereby wins the esteem both of himself and his fellows. To do this, however, he must not only amass wealth, he must also display it, and hence the accumulation and display of material goods becomes essential to establish his position. Cars and servants are maintained, and lavish entertainment given, not for their intrinsic worth, but as a means of impressing one's importance and social status on one's fellows. The result only too frequently is that all real cultural life is killed; crushed under the weight of material goods and the burden of maintaining one's "position".

In a society where production is carried on for use and not for profit this wealth standard will be replaced by a standard of social usefulness, and a man's worth will be judged not by

what he takes out of the common pool but by what he puts into it. In such a society there will be no incentive to amass a large amount of wealth in order to impress one's neighbours, for it will have the opposite effect.

It is true that such a change in social standards will not be accomplished in a day. One of the difficulties in the way of such a change is that for that large mass of people at present living below our reasonable standard the struggle to obtain more material goods is absolutely necessary. They are perfectly justified in using a wealth standard, for to them an increase in wealth normally will bring an increase in happiness; and it may take some time for them to realize that this is true only up to a certain point, and that after that point has been reached it ceases to be true.

It is also true that cultural pursuits themselves demand a certain material basis. They cannot be carried on without the necessary equipment, books, dramatic material, musical instruments and so forth. In addition, recreation for the body is as necessary as that for the mind, and this also will require the appropriate equipment. Furthermore, the general raising of the cultural level will mean that standards of taste in regard to such things as furniture and dress will rise also. The *mere* satisfaction of the basic needs will no longer be considered sufficient, and there will be a demand for houses, furniture, and clothing that are also æsthetically pleasing. This, however, will be a demand for an increase in the quality of goods rather than for an increase in quantity. Few but choice will be the motto rather than mere vulgar display.

It is for these reasons that we have placed the production of luxury and semi-luxury goods last on the list of things for which the Planning Commission has to provide, and have stressed the importance of the health, educational and cultural aspects of its work. In actual practice, however, the division will not be quite so clear-cut as we have assumed. The Commission will not decide first to provide for a complete health service, then a complete educational service on the most up-to-date lines, and only then look round to see if any resources are left to provide for recreational facilities or luxury goods.

It will not be a case of all education and no recreation. Rather will it be a question of balancing more or less education against more or less recreation, and the above list of priorities simply indicates the *relative* importance to be attached to these various activities. Some resources will be devoted to each, but if the total resources available are limited, then more importance will be attached to the earlier items in the list than to the later.

Similar remarks apply to the way in which the proportion of resources to be devoted to new investment is decided. As we have described it so far, it would appear that this decision is made prior to, and independently of, the decisions as to the allocation of resources among the different lines of consumption. These decisions in fact are all inter-related, and in deciding the volume of new capital investment the deciding body will undoubtedly have regard to the needs of education, health and so forth. As has already been pointed out, it is probable that the decisions of policy associated with the broad allocations of resources among these different categories will be determined not by the Planning Commission at all, but by the legislature. When the latter has decided broadly what it wants produced, the Planning Commission will then see to its detailed planning.

We have so far been concerned with the objectives and scope of planning, but the Commission will also have to take into account the conditions under which the work is to be carried out. The citizen must be safeguarded as a producer as well as a consumer, which means that he must work under proper conditions, with adequate safeguards against accidents and industrial or occupational diseases. Here again it is reasonable to assume that the Commission will plan within a framework of Factory Acts, Acts limiting the hours of labour, and so forth, which have been passed by the legislature. So far as their detailed application and adaptation to meet the circumstances of individual factories are concerned, this will be a matter for discussion and negotiation between the managements and the trade unions concerned.

(5) *The Planning of Foreign Trade*

There is one particular problem which has so far not been touched on, and that is the question of foreign trade. Britain must of necessity import a large volume of foodstuffs merely in order to keep her population alive, and we have already seen that a considerable expansion in imports will be necessary if everyone is to attain our reasonable standard. The question of how to secure the necessary imports in a planned economy is thus of vital importance to this country.

It is obvious that in an economy in which industry as a whole is subject to central planning, imports and exports will have to be planned also. The general economic plan will call for certain quantities of raw materials, foodstuffs, etc., part of which will have to be imported, and it will be necessary to provide in the plan for the production of the exports which will be necessary to pay for such imports.

There are some commodities which must be imported because they cannot be produced at home in any practicable quantities; oil, rubber, and oranges are examples so far as this country is concerned. These things, if they are to be obtained at all, must be obtained by means of exports. Then there are other commodities which can be produced at home but which it is normally cheaper to purchase abroad, at any rate in part. The real question is—how are we going to decide which of these goods to produce at home and which it is more advantageous to obtain from abroad by means of exports?

The test is really very simple. In respect of each commodity we have to decide whether it will use up more of our resources—whether, in fact, it will *cost* more—to produce it at home, or to produce enough exports to be able to import it. We shall, in other words, make a direct comparison between the *cost* of producing the commodity in question at home and the *cost* of producing the exports necessary to pay for its importation. These two costs we may call respectively the home-cost and the export-cost. For some commodities, as we have already pointed out, there will be no question about it—the export-cost will be lower than the home-cost whatever the quantity desired.

For these commodities the entire supply will be imported. In most cases, however, the position will be rather more complicated. It will be found that up to a certain quantity of the commodity the home-cost is less than the export-cost because, for example, there are certain factories already available for making it, but that for any further amount the home-cost is greater than the export-cost. If the total amount required by the plan is greater than the amount which can be produced more cheaply at home, then that amount will be met from home production and the rest will be imported. Finally, there will be some commodities for which the home-cost is less than the export-cost whatever the quantity. These will naturally be produced entirely at home.

The important point to notice is that in a planned economy goods are only exported in order to obtain imports, and a *direct* comparison is made between what we have called the home-cost and the export-cost. Under a capitalist system no such direct comparison is possible. A commodity is exported if the price received from its sale abroad exceeds its cost of production, and similarly a commodity is imported if the importer can sell it for more than he pays for it. In other words, both exports and imports, *taken separately*, must be profitable. The exporter is not concerned with the imports that can be obtained in return for the goods he exports, but only with the profit he can make from the sale; and similarly with the importer. In a planned economy, on the other hand, it does not matter if goods are sold abroad below their cost of production, *provided* that more imports are obtained in return than could be produced at home with the resources used up in making the exports. The correct comparison is not between the cost of production of the exports and the proceeds of their sale, but between the cost of production of the exports and the home-cost of the imports obtained in return. In a capitalist economy one can get the absurd position of manufacturing countries with large-scale unemployment in their export trades, and agricultural countries destroying their crops, because neither side can sell its goods to the other at a profit, although each would undoubtedly benefit from a mutual exchange. In a planned

economy, where production is for use and not for profit, and where there is no such artificial separation of imports and exports, such an absurd position could not arise.

The planning of foreign trade will in general be subject to a wider margin of error than the planning of home trade, because the world prices for both imports and exports are outside the control of the Planning Commission. The Commission will make an estimate of the prices it will have to pay for the goods it wants to import and of the prices it will obtain for its exports, and on the basis of these estimates it will fix the quantities of each in such a way that the total value of its exports is just sufficient to pay for its imports.¹ World prices, however, may easily change rapidly and the Planning Commission be forced to modify its imports, its exports, or both, so that the plan is temporarily thrown out of gear. To avoid this the Planning Commission will try to fix up barter arrangements with other countries wherever possible, whereby a definite quantity of its goods is exchanged for a definite quantity of those of the other country. In this way the disturbances caused by market fluctuations in foreign countries are minimized.

There is, of course, no reason why such barter arrangements should be only bilateral, although it must be admitted that "three-cornered trade," whereby barter arrangements are made involving three or more countries, would be far easier where the countries concerned are all operating planned economies than it would be where most of them have unplanned economies. It is clear from what has already been said that imports and exports must be planned together, and this applies even to those commodities where the export-cost is less than the home-cost for all quantities. The Planning Commission, having drawn up a list of what it would like to produce in descending order of preference (which we may call its list of preferences), will endeavour so to arrange its productive resources as to procure the maximum satisfaction of those preferences; and this principle will equally be followed in fixing the kinds and quantities of imports. The only difference is that some of the

¹ Except in so far as it can draw on foreign reserves or credits or is prepared to allow foreign countries to run up a debit balance.

productive resources will have to be considered in a double capacity, since they can be used either directly to produce goods for home consumption or indirectly to obtain imports. Such resources will be transferred from the one capacity to the other up to the point at which the transfer no longer procures a greater satisfaction of the Planning Commission's list of preferences.

It may be objected that in view of the extraordinary range and variety both of needs (alias preferences) and of resources the problem of matching the one against the other so as to secure the best "fit" would be insuperable; and so it probably would be if one had to start planning *ab initio* with productive resources which were completely flexible and could be turned to produce anything. In actual practice, however, the problem does not arise in this way. Some of the factors of production are highly specialized and can only be used to produce the things for which they are specialized. They are, in a word, "non-transferable." Other factors, although they could with some difficulty be transferred in case of need, are already engaged in producing definite commodities and may be considered as at any rate partly specialized in their production. Other factors, such as raw material supplies or, within certain geographical limits, unskilled labour, are more or less completely transferable.

The Planning Commission, in other words, will not start planning in a vacuum; the great majority of the productive resources will already be engaged in some existing line of production and this will provide a basis from which the Commission can build up its plan. So far as the majority of the factories, mines, farms and so forth are concerned, they will continue producing the same kind of goods under the plan as they did before, except that they will produce up to full capacity instead of leaving part of it unused. Any changes in the character of the country's output that the Commission wishes to bring about will be effected in the main through the allocation of productive resources that were previously either unemployed or non-existent. In other words, the Commission will not smash the existing industrial structure to bits and proceed to re-

fashion it anew from the beginning; rather will it take the existing structure as it finds it and gradually modify it to suit its requirements. (So far as Great Britain at any rate is concerned, we may perhaps assume that planned production for use will itself not be introduced suddenly and completely at one fell swoop. It is more likely to start by covering a few key industries and then gradually spread till it covers the whole economic system.)¹

(6) *The Machinery of Planning*

This brings us to the further point that planning is itself a *continuous* process. There has been so much talk about Five Year Plans that we are apt to assume that a rigid plan is made covering a definite number of years under which all production is determined and pre-ordained for that number of years down to the last detail. Such an idea is of course quite fantastic. (What happens in the Russian Five Year Plan, for example, is that the *main lines* of production for the next five years are decided upon, a far more detailed plan for the ensuing year is drawn up, and this plan is itself continuously modified in the light of actual experience.) In fact, there will be a series of plans, covering successively larger periods of time and drawn up with progressively less detail. These plans will be continuously checked up and modified in the light of the stream of information and data, covering every phase of the country's economy, that will be constantly pouring into the Planning Commission.

Not only the Commission, but each plant, farm, factory, or other enterprise will have its plan for the ensuing month, three months, year and so forth, and it is these individual plans which will form the raw material out of which the national plan will be constructed. In addition to the periodical returns covering past production, each enterprise will also make a return showing its programme for future production, together with estimates of the labour force, quantities of raw materials and so on that

¹ This refers to the *economic*, but not necessarily to the *political*, transition from capitalism to socialism.

will be required to enable this programme to be fulfilled. These returns will be co-ordinated and, where necessary, modified by the Planning Commission to form a provisional plan. They will then be returned, as modified, to the individual enterprises for their criticisms and suggestions, on the basis of which the final Plan will be drafted.

Since each industry will presumably be organized as an entity under the control of a National Board, the individual enterprises will in general make their returns in the first place to the National Board for their industry. Each Board will then be responsible for collating the returns for its industry and sending them on with any comments it may wish to make to the Planning Commission. The latter will similarly send the Provisional Plan for each industry in the first place to the National Board for the industry, who will in turn pass on the relevant sections to each enterprise and collect its comments thereon. In order to get the maximum participation of the actual workers in the drafting of the Plan, it will probably be desirable to adopt the Russian practice of having regular meetings of the workers in each enterprise to discuss the Provisional Plan in so far as it affects their enterprise before the comments thereon are forwarded to the National Board for the industry. In this way it will be possible not only to achieve a really genuine industrial democracy but also to utilize the practical knowledge and experience of the workers on the job, while at the same time enabling them to see their own experience in its proper perspective in relation to the industry as a whole.

(7) The Planning of Incomes

We have so far shown that the task of the Planning Commission is essentially to make an inventory of the available productive resources and an inventory of the current requirements of the population, and then to allocate the productive resources in such a manner as to secure the maximum satisfaction of these requirements. We have seen that the latter are of three types, individual consumers' demands, social services, and new investment (including the requirements of new arma-

ments for national defence). The last two are, broadly speaking, determined independently of the individual incomes accruing to the various members of the community, but the first is clearly dependent to a very large extent on the current distribution of incomes. It follows that logically incomes ought to be planned before production, because without a knowledge of the income distribution it is impossible to estimate consumers' demand and hence to plan production. It will be remembered that in criticizing Professor Robbins' views we concluded that it was not so much the use of consumers' preferences *as such* as a criterion of production that was objectionable, but rather the acceptance of the existing consumers' preferences, based on the existing distribution of incomes. It is essential, therefore, if consumers' preferences are to approximate to real needs, to secure a proper income distribution.

The first question to be decided is the total of the incomes to be distributed. If all incomes are spent on consumers' goods, then the total money incomes distributed in any period, whether by way of wage payments or via the social services, must be equal to the money value of the consumers' goods and services made available during that period (subject to a margin, based on past experience, for any stocks left unsold at the end of the period). If, however, new investment is still financed in part from private savings, or if it is found that a certain part of income is hoarded (with due allowance for the release of any sums hoarded in previous periods), then the total money incomes distributed must be increased by the amounts used in this way so that the total money income actually spent on consumers' goods and services remains equal to the money value of the goods and services produced.

So long as this principle is observed there can never be any general over-production relative to demand such as has characterized the slump periods in capitalist countries. Temporary over-production in particular lines of production due to errors of judgment on the part of the Planning Commission can, of course, occur, but these can be quickly corrected and are likely to diminish as the knowledge and experience of the Planning Commission grows. The important thing is that over-produc-

tion *in all lines at once* will no longer be possible, for the simple reason that as production is increased the incomes available to purchase it will be increased also; or, alternatively, prices will be lowered.

One sometimes hears the argument that planning in the Soviet Union has succeeded in increasing production and avoiding unemployment because the standard of living there was so low that the demand for goods of any kind was much greater than could be satisfied, and that the real test will come when the Russian standard of living has risen to that of England or the United States. This argument, however, completely misconceives the whole problem. The fact that there is an unsatisfied demand for goods is no criterion at all of whether they will be produced, as the investigation of our earlier chapters has shown. In point of fact, there was considerable unemployment in the Soviet Union before the introduction of the First Five Year Plan, and unemployment and under-production were as rife during the depression years in capitalist countries with low standards of living as they were in those with high standards. The point this argument overlooks is that production in a capitalist country is determined not by what is needed but by what is *profitable*; that no matter how great the demand for goods they will not be produced unless that demand is *effective*, i.e. unless it is a *money* demand. The real problem in any country, be its standard of living high or low, is to provide the population with sufficient purchasing power to enable them to translate their real need for goods into an effective money demand. The fact that the standard of living is lower in the Distressed Areas in this country than in London has made it more, not less, difficult to provide employment there.

Having fixed the total of incomes to be distributed so as to enable the population to buy all the goods and services available for consumption, the next step is to distribute this total among the various categories of income recipients. Since by far the most important recipients are the wage and salary earners, this in effect comes down to the fixing of relative wage rates for different kinds of work, a task which will have to be

carried out in co-operation with the representatives of the trade unions. Although, as we have already pointed out, complete equality of incomes is not likely to prove practicable, nevertheless it is desirable that the inequalities between the pay for different types of work should be kept down to the minimum required to provide the necessary incentive to people to improve their qualifications. The most important factor here is the provision of adequate opportunities for every worker to become as highly qualified as his abilities will permit. Although equality of actual *income* is almost certain to be incompatible with expanding production, the socialist state will certainly have every incentive to provide equality of *opportunity* to all its members.

The degree of inequality of income necessary to persuade unskilled workers to become skilled and skilled workers to become technically qualified, or to induce sufficient young people to train for professional or managerial posts, obviously depends on a large number of different circumstances and cannot be forecast in advance. It is probable, however, that it will be greatest in the early stages of a socialist economy, while the individualist attitude of mind inherited from the capitalist economy still persists and a new social consciousness has not yet been built up. As the socialist economy continues, it may reasonably be hoped that social incentives will grow increasingly stronger and purely monetary incentives decline, in which case the inequality of incomes necessary will diminish also.

Within this general framework the remuneration of particular types of skill will be determined largely by supply and demand. If there is a shortage of doctors and a surplus of teachers, then it will be necessary to increase the attractiveness to young people of taking up medicine, and decrease that of taking up teaching. To a large extent this will probably be accomplished by non-monetary persuasion through the Press and the schools, and by increasing the facilities for medical studies and restricting those for teaching. If this fails, however, to achieve the desired readjustment it will be an indication that the pay of doctors is definitely too low relative to that of teachers, having regard to the arduousness of their work and training, and the

remuneration of doctors will have to be raised accordingly. Only in very exceptional circumstances is it likely to prove necessary actually to reduce the pay of the teachers.

(8) *The Fixing of Prices*

There is one final question to be considered in this brief outline of the working of a planned economy for use, and that is the question of prices. How will prices be fixed in the socialist state? Clearly no final answer can be given, as the best method will eventually be decided in the light of actual experience, but some tentative suggestions may perhaps be made.

The most obvious basis for fixing prices is cost of production. The National Plan will have been drawn up in the first place in terms of physical quantities—so many tons of coal, so many pairs of boots, and so on right through the list. The labour to be allocated to the various types of output will also have been fixed in the same way; so many doctors, teachers, miners, metal-turners and bricklayers will be required, and they will be distributed among the various enterprises in such and such a way. The relative wage-rates to be paid to the different grades of labour so as to achieve the requisite supplies will also have been settled in the manner already described. From this it is only necessary to fix a basic wage for the lowest type of unskilled labour to get the actual wage-rates for the different grades. (This step is only necessary in the hypothetical case where all wage-rates are being fixed *ab initio*. In actual practice of course there will be an existing scale of wage-rates in operation, and the new rates will be fixed by appropriate variation of the existing ones.) This will provide a “minimum cost of production” for each commodity. For raw materials the cost will consist of the wages of the labour employed in extracting them, and for all other commodities it will be the wages of the labour employed plus the cost of the material used up. (The only exceptions will be where imported materials are used; in these cases the cost will be the actual price paid for the goods, converted into internal currency at a rate decided by the Planning Commission.) The cost thus arrived at will in effect

be a labour cost and will include no allowance for capital depreciation, interest or rent.

It is clear, however, that the prices charged to consumers must exceed the costs of production calculated in this way. If they do not, the aggregate of the wages paid out will greatly exceed the aggregate value of the goods on sale, since the latter will only be equal to the total wages paid out in the industries making consumption goods (including the industries making materials that are actually used up in the production of such goods). The workers in these industries will thus receive enough wages to buy all the consumers' goods coming on the market, leaving none over for the workers in the capital goods industries or the recipients of payments from the social services.

It follows from this that prices of consumers' goods must in the aggregate exceed their minimum costs of production (as defined above) by the amount of the incomes paid out in the capital goods industries, in public administration (including the armed forces), and through the social services. The recipients of all these incomes are entitled to their share in the community's consumption although they themselves have not directly contributed to the supply of goods *immediately* available for consumption. The share of the workers immediately engaged in the production of consumption goods has therefore to be correspondingly curtailed, and the only way of doing this apart from direct rationing is through the price system.

How then is this addition to prices to be distributed among the various commodities? In the capitalist system, of course, the price of each commodity includes, in addition to the minimum cost of labour and raw materials, an allowance for capital depreciation, rent, and interest on loan capital, together with such a margin for profit as the entrepreneur thinks he can get. The assumption is that the total of these additional charges will just equal the consumption of the recipients of unearned incomes plus the wages paid out in the capital goods industries; but as we have already seen this assumption is frequently very wide of the mark since there is no inherent reason why these two totals should be equal unless steps are deliberately taken to make them so. Hence the capitalist system

alternates between boom and slump but is hardly ever in a state of equilibrium. In the planned economy, on the other hand, prices will be deliberately fixed so as to make the total value of consumption goods equal to the total of incomes, so that this kind of disequilibrium cannot arise. There will probably be a number of different ways of fixing relative prices so as to fulfil this condition, and the task of the Planning Commission will be to choose the one best suited to satisfy the community's basic needs.

Normally it would appear reasonable to include in the price of a commodity some allowance for capital depreciation. If we assume for the moment that an addition is made to the price of each commodity (or service) on this score sufficient to write down the value of the different types of plant and machinery employed in its production to zero at the end of their various expected lives, we shall have provided for the incomes distributed in the course of keeping the community's stock of capital goods intact. We shall still have to provide for those incomes distributed in the course of *increasing* the stock of capital goods (i.e. the wages cost of the *net* annual addition to capital investment), together with the incomes paid via the social services and to those engaged in public administration (except in so far as these are financed out of contributions from, or taxation on, personal incomes). The further additions to prices to be made on this score can best take the form of taxes, of which the easiest and simplest is probably a turnover tax. This will be adjusted, not according to the amount of capital employed in each industry, but according to the social value of the industry's products. Industries concerned in the production of necessities will pay little or no tax, while industries producing luxury goods will be subject to a much heavier rate of tax.

In this way it will be possible to expand the production of the necessities of life and to cheapen their price so that those receiving the lowest wage can achieve the minimum standard of life. The same will apply to other commodities whose consumption it may be considered socially desirable for one reason or another to expand, such as books or travel facilities. Simi-

larly, commodities whose consumption it was desired on social grounds to discourage, such as betting or alcoholic beverages, would suffer a rate of tax above the average (a principle already applied at the present time in Britain so far as these two commodities are concerned).

The calculation of prices in this way, (labour and raw material cost plus capital depreciation allowance plus turnover tax), will provide a basis for price fixing under normal circumstances. It will be seen that the prices so fixed differ from those obtaining in a capitalist society in that they include no allowance for rent, interest, or profit—these items being replaced by the turnover tax. There are some commodities or services, however, where it may be desirable to charge a lower price than the one obtained in this way with the turnover tax taken at nil, or even to charge no price at all. An obvious example is education where it is highly desirable that full educational facilities should be available to all irrespective of income, which means that for the great majority the facilities will not only have to be free but adequate maintenance allowances will have to be granted also, at least so far as higher education is concerned. An intermediate case is probably housing, where it might reasonably be decided to charge a rent, at least for the minimum standard of house room considered desirable, that is insufficient to cover the full depreciation allowance. Or again, it may be considered desirable on public health grounds to encourage the consumption of milk by retailing it below the minimum cost. In all these cases the turnover tax is in effect negative, (in other words, it is replaced by a subsidy), and the rate of tax on other goods, less desirable from the social point of view, will have to be correspondingly increased.

In general, therefore, we may suggest that prices should be fixed on the basis described above, but that they should be diminished in the case of those commodities or services necessary to satisfy the basic needs in such a way that the recipient of the lowest wage should be able to achieve the minimum standard of living considered desirable; and that the prices of luxury and socially less desirable goods should be correspondingly increased.

(9) *Summary of the Economic Conditions Necessary for Socialism*

We have now completed our sketch, and admittedly it is no more than a sketch, of the general principles on which a planned economy for use would be based. We have restricted ourselves to describing the workings of a socialist society in full operation, and we have done no more than hint, at the end of Chapter VIII, at the steps that will be necessary to bring about the transition from capitalism to socialism; nor have we attempted to put forward a detailed immediate programme for raising the standard of living of the poorer section of the community. Furthermore, we have confined ourselves solely to the *economic* aspects of the problem, and have not touched on the *political* questions involved, either in a socialist society or in the transition to it. All these questions have been ignored intentionally, because to deal with them would unduly prolong the length of this book, but it must not therefore be thought that they are unimportant. They are indeed of vital importance, and it is to be hoped that the reader, if he has been convinced of the desirability of the socialist planned society, will proceed to a study of the political problems involved in achieving it. In this sense, the present book must be considered as only an introduction, designed to convince of the desirability of a change to socialism, rather than as an attempt to deal with the main problem of how to bring that change about.

It may be as well at this point to summarize the economic conditions necessary for the establishment of the complete socialist society. The first and most important condition is the abolition of the private ownership of the means of production and its replacement by communal ownership. This is clearly essential if production is to be planned on behalf of the community, because as we have already seen it is becoming increasingly impossible to reconcile private profit-making in industry with production for use. This does not of course mean the abolition of private property used for the direct enjoyment of the owner and not to produce a profit, such as a house occupied by the owner; nor does it even mean the abolition of small shops or businesses run by one man or by two or three

men in co-operation. What it does mean is the abolition of the right of one man to make a profit out of another's labour as the result of owning the means of production necessary to the other's livelihood.

It is of course improbable that all the means of production will pass into communal ownership at one fell swoop. The more likely course of events is that the State will first take over the key industries, such as the banks, transport, heavy industry and the mines, and then gradually extend its control over the light industries. The large firms in the light industries will presumably be taken over fairly quickly, but it is likely that small businesses, catering either for local needs or making products that are relatively unimportant from the national point of view, will persist for quite a long time. In most of the important industries such firms are already being squeezed out by the large combines or brought under control by the various rationalization and marketing schemes at present being operated, frequently as we have seen under Government auspices. They tend to survive in the luxury trades and in certain specialized lines of producers' goods; there are, for example, many small engineering firms who specialize in supplying particular parts to the large firms, but in these cases they are to all intents and purposes controlled by the latter even though they preserve their separate identity, and it is quite possible that they will continue under private ownership for some time after the large firms have been nationalized.

There are two particular industries in which the small man is likely to continue for some while after the major industries have been nationalized—distribution and agriculture. The small shopkeeper is likely to persist for many years, particularly in the villages; and similarly agricultural production is likely to be based on the tenant farmer for a considerable period, although the land itself will probably be among the first of the national resources to pass into public ownership.

The fact that some industries and firms will remain in private ownership longer than others does not mean that they will not be taken into account in drawing up the National Plan. The Planning Commission will have to take account of such

firms and industries both in estimating output and in fixing the total and distribution of incomes; although since the Commission will not have the same powers of control in the case of private firms as it will have over the State-owned concerns its estimates in this field will naturally not be so reliable. Some control will of course be exercised over firms still in private ownership, both over the conditions and pay of the employees, and over output in so far as the State will control both the supply of the firm's raw materials and the demand for its finished products.

This brings us to the second essential condition of a socialist society, the necessity of a national plan covering both the production of goods and the distribution of incomes. Since the whole of this chapter has been concerned with the necessity of planning our productive resources if we are to solve our economic difficulties and achieve our reasonable standard of life for everyone, there is no need to go over the ground again. It is, however, necessary to stress once more, even to the point of being considered wearisome, that planning is as much an essential condition of socialism as public ownership, because of the view that seems to be prevalent among quite a large number of people who consider themselves socialists that public ownership *by itself* constitutes socialism. This view is probably most prevalent among the older generation of socialists, and is based on the argument that it is inequitable that the profits of industry should accrue to a small section of the community, and that industry should therefore be nationalized and the profits used for the benefit of all instead of a few. It will be seen that this argument is essentially an ethical one; it does not contemplate that industry under socialism will be run on fundamentally different principles, only that its products shall be more widely distributed.

The argument of this book, on the other hand, has been on rather a different plane. It has been concerned to show, not that the present economic system produces results which are *inequitable* (although this of course is not denied), but that it is fast becoming *unworkable*. The argument, in other words, is essentially an *economic* one, and we have been led to the socialist

planned state not from considerations of abstract justice but from our desire to find a system which will at least provide everyone with the minimum necessary for a civilized life, after having seen that the requisite productive resources are available. We have been forced, therefore, to set out the principles on which the new system should be based, and we have found that public ownership is a necessary prerequisite to the adoption of those principles. It is thus a means to an end, not the end itself.

It may fairly be argued that the official policy of the Labour Party is open to some criticism on this score. It is true that this policy contains some brave words about applying "a policy of full and rapid socialist economic planning, under central direction,"¹ nevertheless the concrete measures proposed are all concerned with the transference to public ownership of specific industries, the inference being that once they have been transferred the problem is solved and, so far as they are concerned, socialism achieved. Very little consideration appears to have been given to the principles on which such publicly owned industries should be run, except that of covering their debt charges, nor to the question of co-ordinating the various individual industries by means of a national plan. Dr. Dalton, in his book *Practical Socialism for Britain*, does indeed devote a whole section to planning, but the function of his State Planning Department appears to be to prepare a number of plans covering such items as credit expansion and public works to cure unemployment. There is no discussion of the *principles* of socialist planning or apparently any realization that they differ from those of capitalist production.

This emphasis on public ownership to the detriment of the principles of socialist planning may account at least in part for the unfortunate failure of the Labour Party's policy to arouse any real enthusiasm. The ordinary man in the street does not see what difference the nationalization of the Bank of England, for example, is going to make to him, or how it is going to help him to obtain a better standard of life; nor can he really be blamed for this if the Labour Party makes no real attempt to

¹ Summary of Labour's Aims, published in *For Socialism and Peace*, p. 5.

explain it to him. The result is that he is either indifferent to the whole policy or else thinks that the Labour Party are a lot of interfering politicians out to serve their own ends. Until the Labour Party explains far more clearly than it has done so far just how public ownership is going to better the lot of the ordinary man and woman it seems doubtful whether its programme will arouse much real enthusiasm.

The third essential condition of a socialist society is the abolition of incomes accruing solely by virtue of the possession of property. In our present society there are two main categories of income, those paid for work done and those arising from the possession of property. In the socialist state the second category will disappear with the transference of income-yielding property to public ownership, and the only title to income will be service rendered, including pensions paid to the old and disabled in virtue of past service and maintenance grants paid to the young in the expectation of future service.

As in the case of public ownership, this abolition of unearned incomes from property is an economic necessity besides being ethically desirable. The great bulk of the really large incomes to-day are incomes from property, and in the past these have been relied upon to finance new capital development. We have already quoted Mr. Keynes' view that under present conditions the growth of wealth is more likely to be impeded than promoted by the "abstinence" of the rich, so that the economic justification for large unearned incomes has now disappeared,¹ and in any case under socialist planning new capital development will be directly undertaken and financed by the State. It follows that incomes in excess of those which can be spent on consumption will be useless to their recipients, since all they can do with the excess is to hoard it. Any such hoarding, however, will tend to upset the planned balance of production and consumption, unless it is specifically allowed for in calculating the distribution of money incomes. Since such incomes cannot benefit their recipients, and may cause dislocation in the economic plan, the only logical thing to do is to abolish them, or at least to abolish the excess above the amount spent

¹ See p. 155.

on current consumption. It may perhaps be objected that there is no limit to the amount it is possible to spend on consumption if one really tries, and that if the rich were prevented from saving and investing part of their incomes they could, and would, spend all their income on luxury goods. This, however, overlooks the fact that the State decides what goods are to be produced, and in what quantities, and if the State limits the output of luxury goods the rich will perforce have to limit their consumption.

(10) *The Question of Compensation*

It may further be objected that to abolish unearned incomes is tantamount to confiscation. This is perfectly true, but what of it? Unearned incomes have been justified in the past by the economic service their recipients are supposed to have rendered, but as we have seen, this justification can no longer be put forward. In fact, the owners of such incomes render a positive disservice to the community by reducing the propensity to consume! Nevertheless, though the abolition of such incomes is both necessary and desirable in the complete socialist state, when everybody is able to obtain an adequate income by working: yet it may be considered both unwise and unfair during the transition period to confiscate incomes from certain types of property, which happen to have been singled out for early transference to public ownership, while leaving unscathed incomes from those types of property which for the time being are allowed to remain in private hands. For this reason many socialists advocate that the owners of property taken over by the State should receive full compensation, and that the reduction of large incomes should be brought about by increased taxation, which would hit property owners who still retained their property equally with those whose property had already been taken over by the State.

This is the view advocated by the Labour Party, and there is a good deal to be said for it on grounds both of expediency and equity, particularly if the transition period is to be at all protracted. (An intermediate method would be partial confisca-

tion, either by compensating by means of terminable annuities which provide the income for a fixed period and then cease, making no provision for any return of capital, or by discriminating between large and small shareholders in fixing the amount of compensation paid. The latter would in effect amount to a graduated capital levy on property as and when it is nationalized.) It does, however, once again involve the danger that public ownership *alone* will be accepted as socialism, and the proviso be forgotten that unearned incomes must also be abolished. For after all, public ownership with full compensation is in many vital respects public ownership in name only; for the ownership is in effect subject to a mortgage equal to the full amount of the value of the property! It is true that the State retains the equity, but since the Labour Party proposes to compensate on the basis of "net reasonable maintainable revenue" (which means that the present owners will receive stock giving them an income equal to that which they could expect to have received from the property taken over) the equity is restricted to the *additional* income resulting from centralized planning over and above that which would have been produced under private ownership. During the transition period this additional income is not likely to be large and may even, at any rate in the early stages, be negative. If this should prove to be the case, the socialized industries might easily find themselves in difficulties in meeting their fixed charges (i.e. the interest on the stock given in compensation).

The Labour Party of course realize that the public ownership of an industry is very seriously limited so long as it is subject to a 100 per cent mortgage, and they therefore propose to redeem the mortgages by setting up sinking funds to repay them. In this way, it is argued, the mortgages will be gradually reduced over a period of years, at the end of which time the industries will be free from debt and the full income be available for communal distribution.

Such repayment, if the sinking funds are not to be prohibitive, would have to be spread over a period of some thirty to forty years, and during this period the effect would be to *increase* the burden of fixed charges on the socialized industries,

so that they would be paying out considerably *more* than the net reasonable maintainable revenue. In other words, the combined burden of interest and sinking fund would for many years *exceed* the total income produced by the industries when they were privately owned. It follows that the socialized industries would probably find it exceedingly difficult, if not impossible, to meet this double burden during the transition period before centralized planning is in full operation, *unless* the capital repayment charge is met out of taxation.

This, after all, is only the logical conclusion of our previous analysis of the present economic system. We saw there that one of the main difficulties of that system is the failure of the rate of interest, and hence of the burden of interest charges, to fall sufficiently fast to maintain the volume of new investment. The Labour Party's proposals would not only stabilize, but would actually *increase*, that burden during the period of capital repayment. If, therefore, the socialized industries are not to be faced with the same dilemma as that which at present confronts private profit-making industry, they must be relieved of this burden, and the only feasible way of doing this is by financing it out of increased taxation.

This necessity has a considerable bearing on the form which compensation should take. It used to be proposed that compensation should be paid in the form of Government stock, but of recent years this proposal has rather lost favour, and it is now proposed that the compensation for any particular industry should be paid in the form of stock specifically charged on that industry. This was the course adopted in the case of the London Transport Board and it is apparently the official policy of the Labour Party. The main argument advanced in its favour is that the income on the compensation stock is not guaranteed but is still dependent on the profits of the industry concerned. The coal-owner, for example, would be given stock in a National Coal Board (or whatever the body set up to run the socialized coal industry is called), and the interest on the stock would be a charge on the net income of the coal industry and would only be paid provided that income were sufficient to pay it. The interest on the stock would nevertheless not be increased

beyond a certain maximum figure, however large the net income might be.

At first sight this scheme appears very attractive, as the existing owners are in effect forced to run the risk of the industry's profits not coming up to expectation, while at the same time their participation is strictly limited if profits exceed expectations. In this way, it is argued, the State will obtain all the benefits of reorganization under centralized control, without running any risk of loss. Unfortunately, however, it is doubtful whether in practice things would work out quite so happily as that. We have already seen that the double burden of interest and sinking fund is likely for some time to exceed the net income of the socialized industries, with the result that they will be faced with a continual failure to meet the charges on their stocks. Now an occasional failure to pay the full charges might be pardoned, but a *continual* failure to do so would arouse very great opposition and would certainly lead to a considerable increase in the amount of compensation demanded by the owners of industries still in private hands when their turn came to be socialized. After all, such a continual failure would amount in effect to confiscation, and if one is going to confiscate at all, it is far better to be honest about it and say so openly, rather than pretend to compensate and then not pay up.

In practice, the Government would have to come to the rescue of the socialized industries by granting them subsidies, the cost of which would have to be met out of taxation. So we come back once more to the point that these charges will have to be financed by the State out of taxation! Since, however, the Government will have in fact to help pay these charges, whether it formally guarantees them or not, it might just as well guarantee them in the first place, and so utilize the advantages of its superior credit status when fixing the original terms of compensation; for there can be no doubt but that the amount of stock demanded, and the rate of interest payable on it, will be considerably less if it is Government guaranteed. Furthermore, the whole problem of financing these charges out of taxation will be far simpler if the two

items appear directly on opposite sides of the National Budget than if the various industries have to indulge in an undignified scramble for subsidies to save them from default.

There is another consideration also. We have already quoted Mr. Keynes' view that if our productive resources were fully employed the rate of interest would fall to zero within a generation, and that this "euthanasia of the rentier" is the easiest way of reducing our present great inequalities of wealth. Clearly, this progressive reduction in the rate of interest provides one of the best ways, during the transition period, of reducing the burden of the compensation charges by a series of conversion operations into stock carrying lower rates of interest. Such operations, however, will be far easier if the stock to be converted is all Government stock than if there are a multitude of different stocks, charged on a large number of separate industries, and with widely varying conditions as to interest and capital repayment.

We may conclude, therefore, that the accomplishment of our third condition precedent to the establishment of socialism, the abolition of unearned incomes (or, in Mr. Keynes' terminology, the euthanasia of the rentier), is likely to be far easier if compensation is paid in the form of direct Government stock than if it is paid in the form of stocks charged on the proceeds of the individual industries. But the advantages of this method do not stop there. It also has the advantage of facilitating the introduction of centralized planning—nay, what is even more important, of *forcing* the adoption of such a system of planning. We have already pointed out the danger that public ownership may be considered as in itself constituting socialism, instead of being regarded merely as the instrument through which socialist planning may be carried out. This danger is intensified when compensation is paid in the form of stock chargeable on the individual industry; for it is then highly probable that those in charge of the various socialized industries will consider it their prime duty so to conduct those industries that receipts cover fixed charges. In other words, their criterion of the successful and efficient conduct of each industry will not primarily be service to the consumer, but

rather ability to meet the interest and sinking fund on its stocks. This is particularly likely to occur if those in charge of the conduct of the socialized industries—the members of the National Boards or Trusts set up to run them—are industrialists or financiers who had taken a leading part in the industries concerned when they were still in private hands; for their whole tradition and training would lead them to regard the fulfilment of the contractual obligations on their stocks as the be-all and end-all of efficient management. They would almost automatically tend to regard the Board or Trust as a large private company to be run primarily in the interests of the stockholders, in other words the ex-shareholders.

Nor would such a criterion of successful management be merely a hang-over of capitalist tradition. The Labour Party apparently envisages a continued reliance on private savings for the financing of schemes of capital development, which means that a socialized industry wishing to obtain fresh capital will have to do so by making a public issue through the medium of the new issue market. It is true that such issues will have to be licensed by the National Investment Board which the Labour Party proposes should be set up, and this Board may be expected to advise as to the terms on which the issue should be made. Nevertheless, in the last resort these terms will be settled by the credit standing of the industry making the issue, which in turn will depend on its past record in meeting its obligations and on the degree of "cover" available for the service of the new loan (i.e. the number of times the interest and sinking fund on the loan are covered by the income available to pay them). The Board of each socialized industry will thus have every incentive to improve its financial standing "in the market" (i.e. on the Stock Exchange), by maximizing its receipts and reducing its costs, in order to improve the terms on which it can borrow fresh money. But this means that each Board will be actuated by precisely the same motives as those which actuate our industrial leaders to-day, and will inevitably be led to adopt the same practices—cutting of wage-costs and restriction of output in order to keep production profitable—which we have seen has led to such dismal

results. In other words, although industry will have nominally passed into public ownership, the motives underlying its conduct will have remained unaltered, with the result that productive resources will remain unused (and poverty remain unalleviated) because it will still not "pay" to use them.

It may be objected that this argument is only valid provided each Board is left free to conduct its industry in its own sweet way, and there is no central planning body to allocate resources and say what should be produced; and it must be admitted that the argument is directed mainly to showing the dangers of public ownership without central planning, dangers which are greatly enhanced if each has to bear the burden of its own compensation charges. Nevertheless, the argument still applies even if a National Planning Commission is set up with authority to draw up a national plan and allocate productive resources accordingly; for in that case a direct conflict between the Boards of the various industries and the National Planning Commission would appear almost inevitable. The Commission will tell the Board of a particular industry that in accordance with the national plan it must expand production by so much and, in order to sell the increased output, it must reduce its prices by so much; furthermore, the Board must pay such and such wages to its workers, who shall work for so many hours a day. To all of which the Board will reply, quite reasonably from its point of view, that it would be delighted to do all these things, but unfortunately it is already having considerable difficulty in making its receipts cover its costs plus the interest and sinking fund on its stocks with its current levels of output, wages, and hours; that it is already producing as much, paying as high wages, and working as short hours as is consistent with the necessity of earning enough to meet its obligations, and that, in a word, the Commission's proposals, though highly desirable, are unfortunately quite impracticable. The Commission will then be faced with the dilemma of either accepting the Board's estimate of the most desirable levels of production, wages, etc. (which will be the levels which will maximize its net income) or else of forcing the Board to accept its proposals and so run the risk of not being able to meet its obligations.

The Board will presumably not object to increasing its production provided that it can do so without reducing prices; but if production is to be increased generally throughout industry without any corresponding reduction in prices, then there will have to be a general increase in wages to enable consumers to purchase the additional goods coming on the market. The Boards of the socialized industries, however, are likely to object even more strongly to being forced to increase wages than they are to increasing output and reducing prices. They will put forward the old familiar plea that "the industry cannot afford it," by which they will mean that the industry cannot afford *both* higher wages and the full interest on its stocks, just as private industrialists making the same plea mean that industry cannot afford both to pay higher wages and to maintain shareholders' dividends. (This was strikingly illustrated in the case of the strike of the London busmen for a 7½ hour day. The London Transport Board's answer to every argument brought forward by the men, including medical and other evidence of the deleterious effect of the current hours on the men's health, was that they could not afford it—that the cost of conceding the men's demand would endanger the fulfilment of the Board's contractual obligations to its stockholders.)¹ Thus the present conflict between the interests of consumers in maximizing production and those of shareholders in maintaining profits in face of the falling marginal efficiency of capital will be transferred to a similar conflict between the interests of consumers and those of the holders of compensation stock. The former will demand the expansion of production far beyond the point of maximum profit, while the latter will demand its restriction to this point. Thus the Planning Commission will find itself continually at loggerheads with the Boards controlling the individual industries, with the result that even if its point of view is ultimately enforced, the friction engendered is bound to be harmful to the efficiency and smooth running of the economic machine.

¹ The necessity of fulfilling these obligations was also the basis of the Board's successful application to the Railway Rates Tribunal for an increase in fares.

If, on the other hand, compensation is paid in the form of Government stock, this conflict of interest between the Planning Commission and the Boards of the individual industries will not arise. The Boards will no longer be faced with the difficulty that if they expand production too fast their net income may not be sufficient to meet the service on their stocks; nor will they be able to object to raising the wages of their workers on the same grounds. There will thus be no economic reason why the community's productive resources should not be expanded as rapidly as possible and utilized to the full, nor why wages should not be continuously raised to enable the increased output to be absorbed, even if as a result the marginal efficiency of capital is reduced to zero.

The method of compensation by Government stock will also have the great merit of *forcing* the Government to plan production for use. If the socialized industries are not to be run on the principle of earning enough money to meet the service of their stocks, some alternative principle must be found; and that alternative can only be planned production for community consumption. The Government will thus be forced to set up a Planning Commission charged with the duty of drawing up such a plan and of seeing that the plan, when duly approved, is carried out.

Such a plan will be necessary not only to secure the allocation of resources best suited to meet the community's needs, but also in order (paradoxical though this may appear!) to finance the payment of interest on the compensation stock issued by the Government. The service of the National Debt, including the compensation stock, together with the costs of the social services (which presumably will be greatly expanded) and of public administration, will have to be met out of taxation, and there can be no doubt that part of the taxation will have to be provided by the socialized industries, even if the tax on private unearned incomes is considerably increased. The socialized industries, in other words, will not be able to collar the whole of the surplus accruing from their relief from paying dividends to stockholders. Part of this surplus they will no doubt use to expand production and reduce prices, but the rest will have to be handed over to the State; and the necessity of

deciding how much each industry is to hand over in this way will inevitably involve drawing up a general plan of production. The difference between this and the alternative method of each industry financing its own interest charges is that under this method the burden of interest charges is distributed among the various industries, not in accordance with the amount of compensation they have been forced to pay, but in accordance with social need. Only part of the burden will have to be paid by the socialized industries, (the remainder being financed out of increased taxation on unearned incomes), and that part will be distributed among the various industries in inverse ratio to their importance in satisfying the community's needs. Industries producing necessities will pay a relatively small tax and will thus be able to use the greater part of their surplus to expand production and reduce prices; while industries producing luxury goods on the other hand will pay over the greater part of their surplus. This principle of adjusting the burden of taxation according to the social value of the goods produced is of course the same as that discussed earlier in connection with the financing of the social services and of capital development in a complete socialist economy.

There is one corollary consequent on the payment of compensation in the form of Government stock that should perhaps be mentioned, and that is that any new loans raised through the medium of the new issue market will also have to be raised by the Government and not by the Boards of the individual industries; for clearly if the Boards have to rely on raising loans in the market to finance their capital development the same conflict will arise between their desire to improve their credit status and the demands of the Planning Commission. Reliance on private savings to finance capital development should in any case be restricted as far as possible, since it clearly helps to increase and perpetuate unearned incomes. Capital development should therefore be financed as far as possible out of taxation and out of the surpluses (or "profits") of industry; resort to the Stock Exchange being considered as only a temporary expedient to be abolished (together with the Stock Exchange itself) as soon as possible.

There would also appear to be no point in setting up sinking

funds to repay the compensation stock over a period of years. The service of the sinking funds would have to be met out of increased taxation. In so far as this is obtained by increasing the taxation on unearned incomes, it simply amounts to taking the money from the rich in order to pay it back again in the form of capital repayments, a process involving a considerable amount of administrative inconvenience and expense without any compensating financial advantage to either side. In so far as the money is raised by increasing either indirect taxation or the level of taxes on earned incomes it involves increasing the amount of the national income paid to the rentier class beyond the "net reasonable maintainable revenue," i.e. *beyond* its present level. This would be highly undesirable both socially and economically, since from both points of view one of the main objectives of socialist planning is to reduce the toll of unearned incomes gradually to vanishing point. A socialist Government should therefore aim, not at *repaying* the compensation stock, which would simply perpetuate in another form the claim of the rentiers on the income of the community, but at gradually extinguishing that claim. This it should accomplish indirectly by means of periodically converting the stock into stock carrying a lower rate of interest, as and when conditions on the Stock Exchange permit, and directly by increasing death duties and income tax on unearned incomes.

Working on these lines, it should prove possible to bring about the euthanasia of the rentier and to introduce a planned economy for use in which all productive resources are fully employed and a standard of living at least as high as our reasonable standard is made available to every member of the community. If, however, a policy is pursued of setting up "Public Boards" (on the lines of the London Transport Board) to run the various socialized industries, each Board operating as a separate entity on the basis of achieving financial self-sufficiency, and with no provision either for centralized socialist planning or for gradually extinguishing unearned incomes, then the paradox of poverty in the midst of potential plenty will remain unsolved. There will be public ownership of the means of production in name, and State regulation in fact, but

he regulation will be directed not to raising the standard of living of the many but to maintaining the unearned income of the few—a state of affairs nearer akin to fascism than to socialism.

We have dealt at some length with this question of compensation, not so much because of its intrinsic importance, but because it illustrates the widespread muddle-headedness that exists even among socialists on the question of the economic prerequisites of socialism. This was strikingly displayed in the recent controversy within the Labour Party on the question of the Popular Front, when the National Executive of the Party justified their refusal to co-operate with non-socialist parties or groups on the ground that this would necessitate a watering-down of their socialist programme. It is quite clear from the foregoing discussion that their programme cannot be considered a socialist one in the sense that its fulfilment would bring about socialism. At best, it would be no more than a step in the right direction, while at worst it might actually make the achievement of socialism more difficult.

(II) *The Political Struggle for Socialism*

On the other hand, it must not be thought that the attainment of socialism is purely a question of the form in which compensation is paid, and that, provided the right form is adopted, all that is required is to pass the requisite Acts of Parliament. As has already been said, the political problems involved in the achievement of socialism have been deliberately excluded, as lying outside the scope of this book, but it would give a totally misleading impression if we were to conclude without pointing out that our third condition—the abolition of all unearned incomes derived from the ownership of property—involves the dispossession of one of the most influential and powerful sections of the community. This section, though small in numbers, commands the most important positions in the State, and the experience of the fascist countries shows that it will not hesitate to use any and every measure, up to and

including the complete suppression of all democratic rights and liberties, to maintain its privileged position. Furthermore, as we saw in the chapter on restriction and destruction schemes, the largest and most important owners of capital are increasingly using the State to bolster up their profits by measures which involve an attack on the standard of living of the mass of the people. This attack necessarily involves also a progressive restriction of democratic rights and liberties, and ultimately their complete suppression under a fascist dictatorship. It follows that socialism will only be achieved as the result of a continuous struggle against, and the final ousting from power of, the finance-capitalists who at present dominate our economic life.

This struggle, in its economic aspect, is essentially one to preserve, and if possible, improve, the standard of living of the majority of the population, against the attempts of the finance-capitalists to reduce it so as to maintain their profits. We must not therefore wait for the achievement of socialism in order to provide everybody with our reasonable standard of life. It is true that this standard cannot be permanently guaranteed except as a result of socialist planning, but, nevertheless, considerable advances could be achieved, even within the framework of a capitalist economy, by a determined Labour or Progressive Government which was fully conscious of the political struggle involved. We saw in our analysis of the present economic system that employment, and consequently the standard of living of the poorest sections of the community, could be considerably increased by State investment; and that this investment, moreover, could be of a character which would directly benefit the working class, such as expenditure on housing and slum clearance. Furthermore, such a Government could take some steps towards the achievement of one of the conditions necessary for socialism—the abolition of unearned property incomes—by increasing surtax and death duties and by using the proceeds to extend the social services.

These measures can play as important a part in the struggle for socialism as the actual transfer of industries to public ownership (which, as we have seen, is only one of the three

conditions necessary for a socialist economy) and they have the added advantage that they would command the support of many people who sincerely wish to abolish poverty but are not yet convinced that socialist planning provides the only final cure.



APPENDIX I

THE DISTRIBUTION OF EXPENDITURE IN WORKING-CLASS FAMILY BUDGETS

OUR object is to determine how, in fact, the working class do spend their incomes, by an examination of some of the collections of family budgets that have been made from time to time. The number of collections available is, unfortunately, limited by the fact that in many of the surveys described in the text actual budgets were not collected, the number of families living in poverty being determined simply by comparing the family income with the amount required on whatever poverty standard had been adopted for the purpose of the survey. This was the method used, for example, in the New London Survey. Moreover, many of the more recent investigations in which budgets have been collected have been primarily concerned with the problem of malnutrition, and so have confined themselves to ascertaining the proportion of the income spent on food.

A number of pre-war collections of budgets are available, including one made by Charles Booth during his London Survey, but these are too old to be of much use in determining present-day expenditure. They do show, however, that, even prior to the war, and even among the poorest families, nearly 10 per cent of the total expenditure was on "miscellaneous" items; and this percentage rose fairly rapidly as income increased to nearly 20 per cent. The expenditure on clothing varied from about 10 per cent in the lower income groups to about 15 per cent in the higher groups.

Of the post-war collections, the two most important from our point of view are the budgets collected in the course of the Merseyside Survey and those collected by M'Gonigle and Kirby in Stockton-on-Tees, in both of which family expenditure was obtained in considerable detail.

The Merseyside Survey gives a summary of a large number of budgets collected between 1929 and 1931. The budgets referred to one week's income and expenditure only, with the result that in many budgets no expenditure was returned under the headings of furniture, education, medicine, etc., while even for clothing no

expenditure was returned in some cases. Furthermore, the expenditure returned was only that under the control of the housewife, so that expenditure on the more personal items such as clothing, recreation and tobacco, was almost certainly understated. As these items are the ones on which information is particularly desired, this defect rather impairs the value of the Merseyside budgets from the point of view of our present inquiry.

The budgets were divided into four groups, taken in relation to the poverty line, the standard of poverty adopted being that used in the New London Survey. Group 1 consisted of families whose income was less than 80 per cent of the income necessary to attain this standard, Group 2 of incomes between 80 per cent and 100 per cent of the standard, Group 3 of incomes between 100 per cent and 150 per cent, and Group 4 of incomes of 150 per cent and over.

A precise comparison between these groups and those used by Sir John Orr is, unfortunately, not possible, as the former are based on family income and the latter on income per head. We can say broadly, however, that the Merseyside Groups 1 and 2 would fall within Orr's Group I (i.e. less than 10s. per head); the Merseyside Group 3 in Orr's Group II (10s. to 15s. per head); and the Merseyside Group 4 in Orr's Group III (15s. to 20s. per head). The following table shows the way in which the median¹ family of each group spent its income.

TABLE XXVI*

	Group 1	Group 2	Group 3	Group 4
	s. d.	s. d.	s. d.	s. d.
Family Income	33 0	38 2	44 0	70 6
Family Expenditure	35 11	39 6½	42 10	60 2½
Percentage of Income spent on:				
Food	55	52	49	43
Rent and Rates	28	21	20	17
Fuel and Light	13	11	10	8
Clothing	5	8	8	5
Miscellaneous	8	11	10	13
Deficiency (—) or Surplus (+)	—9	—3	+3	+14
	100	100	100	100

* Based on tables given in the *Survey of Merseyside*, Vol. I, pp. 210 and 216.

¹ The median family is the middle one of the group, if the various family incomes be arranged in a sequence in order of magnitude.

In Groups 1 and 2 expenditure slightly exceeded income, so that, presumably, there was a slight tendency for the family to run into debt. In Group 3, income slightly exceeded expenditure, while in Group 4 the excess was very considerable. The greater part of this excess was, in fact, probably spent directly by the members of the family other than the housewife on their own clothing and recreation, and should really be credited to clothing and miscellaneous expenditure. The percentage actually stated to be spent on clothing in Group 4 is obviously absurdly low.

The poverty standard adopted by the Survey forms the dividing line between Groups 2 and 3. It is an extremely low standard, being based on Rowntree's original poverty standard, and admittedly provides only for the bare necessities. The table clearly shows, whoever, that even at this low level approximately 10 per cent of the family income is spent on items other than the prime necessities.

The Survey also gives an analysis of the expenditure of the average family in Group 4 and of the "average working class family" obtained by weighting the median budgets in each group in proportion to the number of budgets in each group.¹ The results are set out in Table XXVII.

TABLE XXVII

	(1) <i>Group 4</i>	(2) <i>Average Family</i>	(3) <i>At the Poverty Line</i>	<i>Percentage of Total Expenditure</i> (1) (2) (3)		
Equivalent Adults ...	2.26	2.91	2.90			
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>			
Food	26 10	22 4	18 1½	44	46	52
Rent	10 3	9 1	6 5	17	18	18
Fuel and Light ...	5 0	4 4	} 8 0½	8	9	} 23
Clothing*	5 10½	4 3		10	9	
Cleaning	1 8	1 3		3	2	
Clubs	2 6	1 11	—	} 14	} 11	—
Crockery & Furniture*	11½	7	—			
Doctor and Chemist* } Education	1 7½	10	—			
Miscellaneous	3 6	2 1	—			
Fares	1 0	1 0	1 0	2	2	3
State Insurance ...	1 4	1 4	1 4	2	3	4
Total	60 6½	49 0	34 11	100	100	100

¹ Op. cit., pp. 227 and 233.

The items marked * are based on the arithmetic average, and not on the median of Group 4, as in the opinion of the authors of the Survey this gives a truer picture in the case of items which are not bought every week ; so that the table is not strictly comparable with the figures for Group 4 given in Table XXVI. The amount spent on clothing, for example, is considerably increased as a result. It should also be noted that the percentages given in the last three columns are percentages of the total expenditure, and not of the total income.

The percentage spent on "miscellaneous" is considerably higher than that given for any of the groups in Table XXVI. This is because the authors have added 1s. 4d. for National Health and Unemployment Insurance contributions, and 1s. for transport to and from work. These were not allowed for in the previous table as they were not among the details entered by the housewife. Clearly, they should be allowed for in any standard to be applied to gross incomes, such as form the basis of Sir John Orr's table given in Chapter III.

TABLE XXVIII

	(1) <i>At the Poverty Line</i>	(2) <i>Unemployed</i>	(3) <i>On Public Assistance</i>	<i>Percentages</i>		
				(1)	(2)	(3)
Equivalent Adults ...	3·80	3·80	3·96			
	s. d.	s. d.	s. d.			
Food ...	23 9	17 4	19 6½	57	47	52
Rent ...	7 5½	8 8	7 7	18	24	20
Fuel & Light	} 10 5½	3 11	3 8½	25	20 { 11 7 2	19 { 10 7 2
Clothing ...		2 7½	2 6			
Cleaning ...		11	11½			
Clubs ...	—	1 8	1 6	—	} 9	} 9
Crockery and Furniture ...	—	3½	1½	—		
Doctor and Chemist ...	—	6	3½	—		
Education ...	—	1	—	—		
Recreation ...	—	—	—	—		
Tobacco and Alcohol ...	—	8	8	—		
Miscellaneous	—	2	7	—		
Total ...	41 8	36 10	37 5½	100	100	100

Finally, the Survey compares the poverty standard with the expenditure of over 100 families (roughly one-third of the total number of budgets collected) with a male head in receipt of either unemployment benefit or public assistance.¹ The results are set out in Table XXVIII.

From this table it is clear that while both groups spent less than the amounts provided in the poverty line scale on all the prime necessities except rent, yet they spent over 3s., equivalent to 9 per cent of their income, on miscellaneous items not provided for in the scale. On this the Survey makes the following illuminating comment:

These families apparently stint themselves in their expenditure on food, consuming less than is physiologically desirable, in order to purchase other "amenities" which may to them be no less essential. The heaviest item is the subscription to clubs, and this may be amply justified on the ground that failure to maintain trade union subscriptions may prejudice a man's chance of getting a job and failure to keep up payments to a clothing, furniture, or funeral club may mean the loss of all previous subscriptions.²

An inquiry on similar lines was made in 1933 by the Economic Research Section of Manchester University into family budgets in some of the Lancashire towns. The following table gives the average weekly expenditure, compared with the requisite expenditure on the poverty line, of ten families on unemployment benefit.³

TABLE XXIX

	(1) <i>At Poverty Line</i>			(2) <i>Actual Expenditure</i>			<i>Percentage of total income assuming rent to take 20 per cent</i>	
	s.	d.	%	s.	d.	%	(1)	(2)
Food	18	4½	73	12	0½	58	59	46
Fuel	2	4	9	3	3½	16	7	13
Light and Cleaning	1	0	4	1	11	9	3	7
Clothing	3	5½	14		11	4	11	4
Insurance	—	—	—	1	7	8	—	6
Other Items ...	—	—	—	1	0½	5	—	4
Total	25	2	100	20	9½	100	80	80

¹ Op. cit., p. 233.

² Op. cit., p. 235.

³ Based on a table given in the *Manchester Guardian* of January 9th, 1934. The percentages, it must be noted, are not comparable with those given in the other tables, as they are calculated on the net income after payment of rent.

The poverty line was calculated on a basis slightly more stringent than that of the B.M.A. for food, and on Rowntree's poverty standard for the remainder. "Other Items" consist of the balance of family expenditure less the amount paid out for rent and rates.

Once again we find that although the expenditure on food and clothing was considerably less than the amount necessary on the poverty scale, the average family spent 1s. 7d. a week (or 6 per cent of its income) on insurance, and a further 1s. 0½d. (or 4 per cent of its income) on "other items." It is interesting to note, however, that the expenditure on fuel, light and cleaning was considerably in excess of the poverty scale. This may account to some extent for the very small amount spent on clothing, the increased cost of fuel and light being met partly by economizing on clothing. The same feature appears in the Merseyside unemployed budgets given in Table XXVIII above, although in a smaller degree.

Finally, we must give a summary of the budgets of the 141 working-class families in Stockton-on-Tees collected by M'Gonigle and Kirby in 1935. The following table is based on the various tables given in their book *Poverty and Public Health*. For a detailed

TABLE XXX

<i>Income per week</i>	<i>25s. to 35s.</i>	<i>35s. to 45s.</i>	<i>45s. to 55s.</i>	<i>55s. to 65s.</i>	<i>70s. to 80s.</i>	<i>Average</i>
No. of families ...	46	40	31	17	17	141
Avge. no. in family	4.63	5.27	5.83	4.82	5.42	5.28
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Average income per family ...	33 11	42 5	52 4	62 8	78 8	54 0
Ditto per head ...	7 4	8 0½	8 11½	13 0	14 6	10 4½
Expenditure—						
Fares ...	1 2	10	1 4	1 4	1 3½	1 2½
State Insurance	1 7	1 7	1 7	1 7	1 7	1 7
Other Insurance	1 6½	1 11	2 4	2 9½	2 9	2 3
Doctors, etc. ...	8	7	11	8	1 7	10½
Hire Purchase	2½	1 5	1 6	3 0	3 5	1 11
Household utensils ...	10	1 8	1 9	2 6	2 10	1 11
Rent ...	7 10½	9 2½	10 0	11 9	15 4	10 10
Fuel and Light	3 5	3 11½	4 11	5 7	6 2	4 10
Clothing ...	2 8	3 9½	5 3	6 10	9 9	5 8
Balance ...	13 11½	17 5½	22 9	26 7½	33 11½	22 11

description of this extremely interesting investigation readers are referred to the book itself. The budgets were collected in the summer, so that the amounts spent on fuel and light are below those that would be spent on the average of the whole year.

The following table shows the percentage distribution of expenditure in the different income groups. In order to simplify it, expenditures on insurance (other than State Insurance), doctors' bills, hire purchase and household utensils have been lumped together under one heading "Other Items."

TABLE XXXI

Percentage Distribution of Expenditure

<i>Income per week</i>	<i>25s. to 35s.</i>	<i>35s. to 45s.</i>	<i>45s. to 55s.</i>	<i>55s. to 65s.</i>	<i>70s. to 80s.</i>	<i>Average</i>
Fares and State Insnce. Other Items	8 10	6 13	6 12	5 14	4 13	5 13
Rent ...	23	22	19	19	20	20
Fuel and Light	10	9	9	9	8	9
Clothing ...	8	9	10	11	12	10
Balance ...	41	41	44	42	43	43
Total ...	100	100	100	100	100	100

The "balance" given as the last item in the tables is the amount theoretically available for food after payment of the various prior charges. The actual amount available in practice is less than this because there is always some expenditure on small things like newspapers, tobacco, etc., and on items like trade union subscriptions. In comparing the income available for food with the amount required to purchase the B.M.A. minimum diet, M'Gonigle and Kirby deducted arbitrary sums ranging from 6d. in the lowest income group to 1s. 6d. in the highest. These deductions have not been included in the above tables because they were arbitrary and were not based on data given in the budgets. Nevertheless, some allowance will clearly have to be made for such items in constructing our standards. In this connection it is interesting to note M'Gonigle and Kirby's statement that "the sum of one shilling per week is not a high average amount to pay in trade union subscriptions and the varying levies which may accompany membership." Not infrequently also a

worker has various incidental expenses to pay in connection with his employment, quite apart from trade union subscriptions and fares to and from work.¹

One of the most interesting points that emerges from these two tables is that while the actual expenditure on each item (except fares and social insurance contributions) increases as income increases, yet the *percentage* distribution of expenditure is practically the same in all groups except possibly the first. In this group rent takes a larger proportion, and other items a correspondingly smaller proportion, of the family income than in the other groups. The only item which shows a progressive increase from group to group in the proportion of income absorbed is that of clothing. It must be pointed out, however, that M'Gonigle and Kirby showed that in all these groups except the last the balance available for food was less than the amount necessary to purchase the B.M.A. minimum diet. It does not follow that the distribution of expenditure would be the same for incomes where the food expenditure exceeds the B.M.A. minimum. One would expect on general grounds that, for such incomes, as the total income increased so the amount spent on food would form a progressively smaller proportion of total expenditure. That this is in fact so is shown by the results of Sir John Orr's investigation of over 1,000 budgets, from which he concludes that "the average expenditure on food represents a proportion rising from below 20 per cent in Group VI to nearly 50 per cent in Groups I, II and III."²

¹ For example, in a broadcast series given towards the end of 1934 a miner's wife stated that deductions from the nominal wage on this account came to about 10d. a week.

² Sir John Orr: *Food, Health and Income*, p. 27. (2nd edition.)

APPENDIX II

INCREASES IN EXPENDITURE REQUIRED FOR THE MINIMUM AND REASONABLE STANDARDS

THE following table shows the increase in the expenditure that would be necessary to bring each of the Groups up to the minimum and the reasonable standard respectively in respect of each separate item.

TABLE XXXII

(a) *Increases in Expenditure required for the Minimum Standard*
(in £ m.)

<i>Group</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV(1)</i>	<i>Total</i>
Food ...	17	2	—	—	19
Housing ...	7	3	—	—	10
Clothing ...	17	31	17	—	65
Fuel and Light	1½	—	—	—	1½
Miscellaneous ...	21½	33	5	—	59½
Total ...	64	69	22	—	155

(b) *Corresponding Increases required for the Reasonable Standard*

Food ...	70	94	47	20	231
Housing ...	22	29	14	—	65
Clothing ...	31	61	49	20	161
Fuel and Light	9	10	6	—	25
Miscellaneous ...	54	98	66	22	240
Total ...	186	292	182	62	722

INDEX ¹

ACTS OF PARLIAMENT:

Abnormal Importations Act, 188
 Agricultural Marketing Act, 193
 Bacon Industry Act, 196 fn.
 British Shipping (Assistance)
 Act, 211
 Coal Mines Act, 76, 188-90
 Cotton Spinning Industry Act,
 81, 180
 Derating Act, 211
 Housing Act, 38, 61
 Import Duties Act, 68, 188
 Local Government Act, 211
 Milk Act, 207
 Safeguarding of Industries Act,
 174
 Sugar Industry Act, 209
 Wheat Act, 188, 208

AGRICULTURAL ADJUSTMENT ADMINI-
 STRATION, 178-9

AGRICULTURAL MARKETING ACTS,
 193

AGRICULTURAL MARKETING SCHEMES,
 193 *et seq.*

"AMERICA'S CAPACITY TO PRODUCE,"
 63-4

ASSOCIATED PORTLAND CEMENT COM-
 PANY, 170 fn.

BACON:

increase required, 100-1
 Industry Act, 196 fn.
 Marketing Board, 195-200

BANK OF ENGLAND, 174, 266 ¹

BEEF:

increase required, 101-2
 subsidy, 210

BOARD OF TRADE INDEXES OF PRO-
 Duction, 68 *et seq.*, 121, 129

Booth, Charles, 7, 21, 283

Bowley, Professor A. L., 23
 and Burnett-Hurst, 23
 and Hogg, 23

BRAZIL, destruction of Coffee in,
 175-8

"BRITAIN WITHOUT CAPITALISTS,"
 77 fn.

BRITISH IRON AND STEEL FEDERA-
 TION, 190-2

BRITISH MEDICAL ASSOCIATION, 14,
 16, 25, 26, 30, 31 *et seq.*, 56, 58-9

BRITISH OVERSEAS AIRWAYS COR-
 PORATION, 211 fn.

BRITISH SHIPPING (ASSISTANCE) ACT,
 211

BRITISH SUGAR CORPORATION, 210

CAPITAL:

development under Socialism,
 236-42

Marginal Efficiency of, 140 *et seq.*,
 153, 276

reduction to zero, 145

tendency to fall, 145, 148-9,
 150-1, 158-9, 163, 165,
 167, 168

scarcity of, 145, 148 *et seq.*,
 156-7, 158, 166, 168

CENSUS OF PRODUCTION, 68

CHILE, destruction of sheep in, 178

CIVIL AVIATION, subsidy to, 210-11

Clark, Colin, 49, 55

CLOTHING TRADES, 78-9, 121-4

COAL:

increases required in, 71-2

industry, 72-6

royalties, 75-6

Royal Commission on, 75-6

subsidies, 211

COAL MINES ACT, 76, 188-90

COFFEE, destruction of, 175-8

COLWYN COMMITTEE, 81

COMPENSATION, 268 *et seq.*, 279

CONSUMERS' PREFERENCES, 217 *et*
seq., 224 *et seq.*, 232, 234, 256

CONTRADICTION IN CAPITALIST PRO-
 Duction, 149, 156-7, 160, 167, 168

CONTRADICTION BETWEEN PRODUC-
 TION FOR USE AND FOR PROFIT, 161,
 167, 170-2, 215, 263

¹ The reader should also consult the Table of Contents, page v and the List of Tables on page ix.

COPPER, restriction of, 184

COTTON:

acreage, restriction of, 179

industry, 80-90

Joint Committee of Cotton Trade Organizations, 118-19

COTTON SPINNING INDUSTRY ACT, 81, 180

CREDIT EXPANSION, 147, 152

CULTURE UNDER SOCIALISM, 235-6, 245, 246-8

Dalton, Dr., 266

DENMARK, destruction of cattle in, 178

DERATING ACT, 211

DISTRESSED AREAS, 125-7, 257

Dobb, Maurice, 224

Douglas, Major, 2

Dutt, R. P., 178 fn.

EDUCATION, 235-6, 243-5, 262

EGGS, increase required, 99-100

EXPORT-COST, 250 *et seq.*

FASCISM, 279-80

FISH, increase required, 102-3

FIVE-YEAR PLAN, 238, 254, 257

FOOD COUNCIL, 196, 206

FRANCE, 172

FRUIT, increase required, 103

Hall, Sir Daniel, 103, 105, 108-9

Haskell, J. S., 187

HEALTH SERVICES UNDER SOCIALISM, 235-6, 243

HOPS MARKETING BOARD, 193-4

Horne, Sir Robert, 185

HOUSES, number built, 76-7

HOUSING:

increase required in, 59-62, 76-7

Manual of Ministry of Health, 38

under Socialism, 262

HOUSING ACTS, 37, 38, 61

Huxley, Julian, 115

IMPERIAL AIRWAYS LIMITED, 211

IMPERIAL SMELTING CORPORATION, 185

IMPORT DUTIES ACT, 68, 188

IMPORT DUTIES ADVISORY COMMITTEE, 190

IMPORTS:

food, increase required, 106-7

total increase required, 115-20

under Socialism, 250 *et seq.*

INEQUALITY OF INCOMES:

J. M. Keynes on, 155

under Socialism, 233, 258

INTERNATIONAL LABOUR OFFICE, 44, 46

INVESTMENT:

socialization of, 154, 161 *et seq.*

State, 161 *et seq.*, 214, 280

under Socialism, 236-42, 256

IRON AND STEEL, 94-7

Federation, 190-2

tariff on, 190

JARROW, 191-2, 207

Kay, Professor H. D., 108

Keynes, J. M., whole of Chap. VIII, 133 *et seq.*, 214, 222-3, 272

on Inequality of Wealth, 155, 267

on Socialism, 154-65

summary of his analysis, 147-9

LABOUR PARTY, 31 fn., 266-7

and compensation, 268 *et seq.*

and Popular Front, 279

LABOUR WOMEN'S ADVISORY COUNCILS, 31

LINLITHGOW REPORT, 103-4

LOCAL GOVERNMENT ACT, 211

LONDON COUNTY COUNCIL, 171

LONDON, New Survey of, 24, 25, 28, 39, 41, 283

LONDON TRANSPORT BOARD, 270, 275, 278

LUXURIES UNDER SOCIALISM, 246-8

Maggs, J. H., 204, 206

MARGINAL EFFICIENCY OF CAPITAL, 140 *et seq.*, 153, 276

Marsh and Baxter, 196

Marx, Karl, 145 fn.

May, Sir George, 190

MERSEYSIDE, Survey of, 25, 27, 28, 39, 41, 45, 283-7

M'Gonigle, Dr., 3, 11, 25-26, 27, 28, 33, 36, 43, 45, 283, 288-90

MILK:

Act, 207

Bill, 206 fn.

destruction of, 175

increase required, 97-9

in schools, 207

Marketing Board, 98, 113, 200-8

Reorganization Commission, 98, 202-3

MILLERS' MUTUAL ASSOCIATION, 199

MINIMUM COST OF PRODUCTION, 259

- MINIMUM STANDARD defined, 16
 MINISTER OF AGRICULTURE, 3, 112-13
Mises, Professor L. von, 218
 MOSCOW SOVIET, 171
 MUTTON, increase required, 102
- Nash, Walter*, 120
 NATIONAL BOARDS, 255, 270, 273 *et seq.*
 NATIONAL EXPENDITURE, 55
 NATIONAL GOVERNMENT, 170, 201
 NATIONAL INCOME, 49, 53
 NATIONAL INVESTMENT BOARD, 273
 NATIONAL SHIPBUILDERS' SECURITY, LIMITED, 180
 "NATURE AND SIGNIFICANCE OF ECONOMIC SCIENCE", 226-7
 "NUTRITION AND FOOD SUPPLIES" (see Labour Women's Advisory Councils)
- Orr, Sir John*:
 food expenditure, 50, 54, 56, 290
 "Food, Health and Income," 3, 14, 17, 30, 32, 290
 income groups, 17 *et seq.*, 284
 nutrition standard, 25, 32 *et seq.*, 47, 108
 on British Agriculture, 103, 107
Orwin, C. S., 114
 OTTAWA AGREEMENTS, 100-2
 OTTAWA CONFERENCE, 188
 OVERCROWDING SURVEY, 61
- P.E.P. REPORTS:
 Coal, 72-5
 Cotton, 83-9
 Housing, 61
 P.E.P. ON AGRICULTURE, 109-11
- PIGS:
 destruction of, 178
 Marketing Board, 195-200
 number in Britain, 198
 POTATO MARKETING BOARD, 194-5
 PLANNING COMMISSION, 231-3, 236-7, 242 *et seq.*, 252 *et seq.*, 274-7
 PRICE-FIXING UNDER SOCIALISM, 259-262
- PRODUCTION:
 Board of Trade Indexes, 68 *et seq.*, 121, 129
 for use or for profit, 161, 167, 170-2, 215, 263
 PROFIT, tendency of rate to fall, 139, 145, 148-9, 150-1, 158-9, 168, 173
- PROPENSITY TO CONSUME, 153, 155, 157, 163
 PROTECTIVE FOODS, 12, 30
- RATE OF INTEREST, 145 *et seq.*, 148, 151-3, 158-9, 239-40
 REARMAMENT, 127-32
 REASONABLE STANDARD—defined, 16
 RENTIER, EUTHANASIA OF, 157 *et seq.*, 272
Robbins, Professor, 216 *et seq.*, 222 *et seq.*, 256
Rowe, J. W. F., 176, 182-4
Rowntree, B. S.:
 "Human Needs" Standard, 7, 23, 24, 28, 41, 42, 44, 45, 46
 Poverty Standard, 22, 25, 285
 RUBBER, restriction of, 186-7
 RUSSIA (see U.S.S.R.)
Ryan, J., 83-4
- SAFEGUARDING OF INDUSTRIES ACT, 174
 SAMUEL COMMISSION, 75
 SAVING UNDER SOCIALISM, 236-42
 SCIENTIFIC RESEARCH UNDER SOCIALISM, 245
 "SCRAP AND BUILD" SCHEME, 211
Shaw, Bernard, 53
Shimmin, A. N., 90
 SHIPPING SUBSIDY, 211
 SHORT-TIME, Inquiry into, 79
Simon, Sir E. D., 61-2, 77 *fn.*, 171
Sinclair, Sir Archibald, 207
 SLUM CLEARANCE, 61-2
 SOCIAL INCOME, 49, 53
 SOCIALISM, 134, 154, 165, Chapter X (214 *et seq.*)
 basic needs under, 242-3, 247
 capital development under, 236-42
 cultural development under, 235-6, 245, 246-8
 education under, 235-6, 243-5, 262
 health services under, 235-6, 243
 luxuries under, 246-8
 overproduction under, 256-7
 price-fixing under, 259-62
 scientific research under, 245
 "spiritual" values under, 246-8
 transition from capitalism to, 171-2, 254, 263, 279-81
 wages under, 257-9
 SOVIET UNION (see U.S.S.R.)
 SPECIAL AREAS (see Distressed Areas)
 SPINDLES BOARD, 81, 82, 180

"SPIRITUAL" VALUES UNDER SOCIALISM, 246-8

Stamp, Dr. L. Dudley, 108, 114

Stapledon, Professor R. G., 110-13

STEEL INDUSTRY, 94-7

and rearmament, 128-30

STIEBELING STANDARD, 33

STOCK EXCHANGE, 139, 140, 143-4, 153-4, 273, 277, 278

SUGAR:

Beet Subsidy, 103, 208-10

British Sugar Corporation, 210
increase required, 105

Industry (Reorganization) Act, 209

International Council, 105, 184
restriction of, 181-4

SUBSIDIES TO PRIVATE ENTERPRISE, 103, 162-4, 168, 170, 174, 208-12

SURVEYS, SOCIAL:

London, 24-5, 28, 39, 41, 283

Merseyside, 25, 27, 28, 39, 41, 45, 283-7

SWEDEN, 169

TEA:

increase required, 104
restriction of, 181

TEAM VALLEY TRADING ESTATE, 125-126

TECHNOCRATS, 2

TIN, restriction of, 185-6

TOOTAL, BROADHURST, LEE & COMPANY, 88

TRANSITION FROM CAPITALISM TO SOCIALISM, 171-2, 254, 263, 279-81

TURNOVER TAX, 261-2

UNEMPLOYMENT INSURANCE, Committee on, 1

UNITED DAIRIES LIMITED, 203-6

UNITED STATES, 151, 172

destruction in, 175, 178-9

productive capacity, 63-4

restriction in, 181

U.S.S.R., 92-3, 215 fn., 218, 235, 238, 254, 255, 257

VEGETABLES:

increase required, 103

WAGES:

dual role of, 156-7, 225

real and money, 222-3

under Socialism, 257-9

Webb, Sidney and Beatrice, 169, 215 fn.

WHEAT:

Act, 188, 208

destruction of, 175

restriction of, 179, 181

Wisselink, Dr., 87

WOOLCOMBERS' MUTUAL ASSOCIATION LIMITED, 90, 180

WOOLLEN INDUSTRY, 89-90

Wootton, Barbara, 169

ZINC:

restriction of, 185



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